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GRADE

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Virginia
Standards of Learning Assessments



Introducing the

Virginia Standards of Learning

The complete set of items that appeared on the Spring 2000 Standards of Learning test taken by most public school students in Virginia is presented in the following pages. The intent of this release of these test questions is to provide parents and teachers additional information to accompany the Student Performance Report and/or the Parent Report.

The information accompanying each test question is broken into several components:

Reporting Category: Matches the score report and allows for identification of strengths and weaknesses indicated by student scores.

Standard of Learning: Presents the SOL used in developing the assessment question.

Builds To: Indicates how the student will use the content in future course work.

Instruction: Provides information for teachers to use as the SOL is incorporated into instruction.

The answer to each question can be found in the back of the booklet.



English: Reading/Literature and Research Test



RELEASED ▼ SELECTION



Helen Keller was born in Alabama in 1880. Before she was two years old, a childhood illness left her blind and deaf. Shortly before she turned seven, Helen's family hired a teacher from the Perkins Institution for the Blind in Boston. How could anyone teach a poorly behaved child who could neither see nor hear and had never learned to speak?

The Most Important Day

Helen Keller

- 1 The most important day I remember in all my life is the one on which my teacher, Anne Mansfield Sullivan, came to me. I am filled with wonder when I consider the immeasurable contrasts between the two lives which it connects. It was the third of March, 1887, three months before I was seven years old.
- 2 On the afternoon of that eventful day I stood on the porch — dumb, expectant. I guessed vaguely from my mother's signs and from the hurrying to and fro in the house that something unusual was about to happen, so I went to the door and waited on the steps. The afternoon sun penetrated the mass of honeysuckle that covered the porch, and fell on my upturned face. My fingers lingered almost unconsciously on the familiar leaves and blossoms which had just come forth to greet the sweet Southern spring. I did not know what the future held of marvel or surprise for me. Anger and bitterness had preyed upon me continually for weeks, and a deep languor had succeeded this passionate struggle.
- 3 Have you ever been at sea in a dense fog when it seemed as if a tangible, white darkness shut you in, and the great ship, tense and anxious, groped her way toward the shore with plummet and sounding line, and you waited with beating heart for something to happen? I was like that ship before my education began, only I was without compass or sounding line and had no way of knowing how near the harbor was. "Light! Give me light!" was the wordless cry of my soul, and the light of love shone on me in that very hour.
- 4 I felt approaching footsteps. I stretched out my hand, as I supposed, to my mother. Someone took it, and I was caught up and held close in the arms of her who had come to reveal all things to me and, more than all things else, to love me.
- 5 The morning after my teacher came she led me into her room and gave me a doll. The little blind children at the Perkins Institution had sent it. . . . When I had played with it a little while, Miss Sullivan slowly spelled into my hand the word "d-o-l-l." I was at once interested in this finger play and tried to imitate it. When I finally succeeded in making the letters correctly, I was flushed with childish pleasure and pride. Running downstairs to my mother, I held up my hand and made the letters for *doll*. I did not know that I was spelling a word or even that words existed; I was simply making my fingers go in monkey-like imitation. In the days that followed I learned to spell in this uncomprehending way a great many words, among them *pin*, *hat*, *cup* and a few verbs like *sit*, *stand*, and *walk*. But my teacher had been with me several weeks before I understood that everything has a name.
- 6 One day while I was playing with my new doll, Miss Sullivan put my big rag doll into my lap also, spelled "d-o-l-l," and tried to make me understand that "d-o-l-l" applied to both. Earlier in the day we had had a tussle over the words "m-u-g" and "w-a-t-e-r." Miss Sullivan had tried to impress it upon me that "m-u-g" is *mug* and that "w-a-t-e-r" is *water*, but I persisted in confounding the two. In despair, she had dropped the subject for the time, only to renew it at the first opportunity. I became impatient at her repeated attempts, and seizing the new doll, I dashed it upon the floor. I was keenly delighted when I felt the fragments of the broken doll at my feet. Neither sorrow nor regret followed my passionate outburst. I had not loved the doll. In the still, dark world in which I lived, there was no strong sentiment or tenderness. I felt my teacher sweep the fragments to one side of the hearth, and I had a sense of satisfaction that the cause of my discomfort was removed. She brought me my hat, and I knew I was going out into the warm sunshine. This thought, if a wordless sensation may be called a thought, made me hop and skip with pleasure.

E

English: Reading/Literature and Research Test



RELEASED ▼ SELECTION

7 We walked down the path to the well house, attracted by the fragrance of the honeysuckle with which it was covered. Someone was drawing water, and my teacher placed my hand under the spout. As the cool stream gushed over one hand, she spelled into the other the word *water*, first slowly, then rapidly. I stood still, my whole attention fixed upon the motions of her fingers. Suddenly I felt a misty consciousness as of something forgotten — a thrill of returning thought — and somehow the mystery of language was revealed to me. I knew then that “w-a-t-e-r” meant that wonderful cool something that was flowing over my hand. That living word awakened my soul, gave it light, hope, joy, set it free! There were barriers still, it is true, but barriers that could in time be swept away.

8 I left the well house eager to learn. Everything had a name, and each name gave birth to a new thought. As we returned to the house, every object which I touched seemed to quiver with life. That was because I saw everything with the strange, new sight that had come to me. On entering the door, I remembered the doll I had broken. I felt my way to the hearth and picked up the pieces. I tried vainly to put them together. Then my eyes filled with tears, for I realized what I had done, and for the first time I felt repentance and sorrow.

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English: Reading/Literature and Research Test



Reporting Category: Understand a variety of printed materials/resource materials.

A. Standard of Learning: 6.5 The student will demonstrate comprehension of a variety of selections.

c) Use context clues to read unfamiliar words.

Builds To: Increased comprehension and vocabulary development.

A

1 In the last sentence of the second paragraph, the word languor means lack of —

- A good feeling
- B food
- C leisure time
- D money

Instruction: Provide students opportunities to determine the meaning of unfamiliar words by using context clues provided in text.

B. Standard of Learning: 6.5 The student will demonstrate comprehension of a variety of selections.

d) Draw conclusions and make inferences based on explicit and implied information.

Builds To: Comprehension of increasingly complex text.

B

2 Which question is answered in paragraph 5?

- F How old was Helen when Anne came to teach her?
- G What toy did Anne bring Helen?
- H What does Helen learn at the well house?
- J Which two words did Helen confuse?

Instruction: Provide students opportunities to draw conclusions and to locate details from a variety of written materials.

E

nglish: Reading/Literature and Research Test



A. Standard of Learning: 7.6 The student will read and understand information from varied sources.

c) Distinguish fact from opinion in newspapers, magazines, and other print media.

Builds To: The study of persuasive and factual writing continues throughout the Reading/Literature and Research curriculum to enhance students' ability to discern fact from opinion.

A

3 Which of these is an *opinion* expressed in the essay?

A Anne's arrival was the most important day in Helen's life.

B The doll Anne brought Helen had been made by blind children.

C At first, Helen did not understand the words she spelled.

D "Water" was the first word Helen really understood.

Instruction: Have students examine reading materials for examples of factual and opinionated statements.

B. Standard of Learning: 7.10 The student will apply knowledge of resources in preparing written and oral presentations.

a) Use print and electronic sources to locate books and articles.

Builds To: Independent use of resources such as an encyclopedia, a thesaurus, on-line databases, on-line library catalogs.

B

4 You could probably find more information about the people and events in this essay by looking in an encyclopedia under all of these headings *except* —

F K for Keller, Helen

G S for Sullivan, Anne Mansfield

H P for Perkins Institution

J D for Dolls

Instruction: Have students identify topics about which they have questions. Have students use both library and computer sources to investigate their topics and report on the results of their research.

English: Reading/Literature and Research Test



A. Standard of Learning: 7.10 The student will apply knowledge of resources in preparing written and oral presentations.

c) Use graphic organizers to organize information.

Builds To: Work with graphic organizers continues throughout the study of Reading/Literature and Research and increases in complexity.

A

5 Look at this chart of information in the essay.

Helen's Life

Which words belong in the blanks?

A Ignorant, Self-Centered
 B Clever, Famous
 C Sorrowful, Repentant
 D Intelligent, Strong-Willed

Instruction: Have students work with a variety of graphic organizers and identify ways each type can be used to organize information.

Reporting Category: Understand elements of literature.

B. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

a) Explain the use of symbols and figurative language.

Builds To: Work with symbols and figurative language continues throughout the study of Reading/Literature and Research and increases in complexity.

B

6 Which phrase from the essay gives the most vivid insight into how Helen felt before Anne arrived?

F "... the wordless cry of my soul ..."
 G "... childish pleasure and pride."
 H "Neither sorrow nor regret ..."
 J "... a thrill of returning thought ..."

Instruction: Provide students many opportunities to identify and paraphrase figurative language found in prose and poetry.

E

English: Reading/Literature and Research Test



A. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

d) Describe how authors use characters, point of view, and tone to create meaning.

Builds To: Work with characteristics and elements of literature continues throughout the study of Reading/Literature and Research and increases in complexity.

A	<p>7 Which point of view does the author use?</p> <p>A First person B Third person C Omniscient D None of these</p>
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Instruction: Have students identify point of view in a variety of literary works.

English: Reading/Literature and Research Test



RELEASED ▼ SELECTION

Letters to the Editor: Street Basketball

To the Editor:

- 1 Basketball is supposed to be a sport, not a problem. However, that's what it has become in many neighborhoods, where hoops are set on sidewalks for players whose "courts" are our streets. For the safety and convenience of all, the proposed city ordinance prohibiting street basketball deserves our support.
- 2 Young people caught up in an exciting game may not see or hear oncoming cars. Drivers may fail to brake in time to keep from hitting a player. They also risk damaging their cars or other property when swerving or stopping abruptly. This danger is especially acute when games continue into the evening and visibility diminishes.
- 3 Street basketball also limits the use of public space by other residents. Walkers, people pushing strollers, and children riding tricycles are forced into the street where sidewalks are blocked by basketball hoops. Bicyclists and joggers are inconvenienced or even endangered when they must stop suddenly or go out of their way to avoid basketball players who are inattentive to others' needs.
- 4 Since our streets are not all equipped with trash cans, litter is also a concern. Some players are inconsiderate about trash disposal, littering sidewalks and yards with debris from their snacks and drinks. When those who participate in the game don't accept this responsibility, other residents are left with a mess to clean up.
- 5 We are fortunate to live in a city where there are basketball courts in most schools, parks, and recreation centers. Those who want to play this sport should use properly equipped facilities and leave our streets and sidewalks to motorists and pedestrians for whom they were intended.
- 6 To avert potential tragedy and resolve neighborhood controversy, let's urge our city council members to back the ban on street basketball.

Sincerely,

Tony Pérez

Tony Pérez
Concerned Parent

English: Reading/Literature and Research Test



RELEASED ▼ SELECTION

To the Editor:

- 1 The proposed plan to outlaw street basketball would cause unnecessary hardship among our city's young people. Allowing hoops to be placed on sidewalks encourages participation in a fitness activity that helps players develop skills as well as friendships. Street basketball also keeps young people close to home after school and on weekends.
- 2 Basketball is a popular and fast-paced sport that attracts boys and girls of all ages. While school and league teams may set high standards to play, the street version of the game is open to everyone. In this informal setting, no fees are charged and uniforms are not required. Players can get together within walking distance of their homes, so they don't need to arrange or pay for transportation. Casual, unscheduled games allow young people to get some extra exercise without interfering with more structured extracurricular activities.
- 3 Far from dividing neighbors, street basketball helps foster a sense of community. While playing in a low-pressure, friendly environment, young people may meet peers who attend different schools. Because they are held outdoors, street basketball games bring a variety of people together as players and spectators.
- 4 Before banning such a positive pastime, neighbors should meet to discuss their concerns. Hours of play might be limited, new speed limits posted, and trash receptacles installed. As members of a community, we can negotiate safer, more considerate ways to play and live together.

Sincerely,

A handwritten signature in cursive script that reads "Kim Park".

Kim Park
Eighth-Grade Student

English: Reading/Literature and Research Test



Reporting Category: Understand a variety of printed materials/resource materials.

A. Standard of Learning: 6.5 The student will demonstrate comprehension of a variety of selections.

c) Use context clues to read unfamiliar words.

Builds To: Work with context clues continues throughout the study of Reading/Literature and Research and increases in complexity.

A

8 What does the word avert mean in paragraph 6 of Tony Pérez's letter?

- F Prepare
- G Encourage
- H Prevent
- J Satisfy

Instruction: Provide students opportunities to determine the meaning of unfamiliar words by using context clues provided in text, and the prefixes, suffixes, and roots of the words themselves.

B. Standard of Learning: 6.5 The student will demonstrate comprehension of a variety of selections.

f) Compare and contrast information about one topic contained in different selections.

Builds To: Work with comparing and contrasting information continues throughout the study of Reading/Literature and Research and increases in complexity.

B

9 Both letters agree that basketball is —

- A a danger when played in the street
- B a game that helps foster a sense of community
- C the cause of controversy among neighbors
- D an exciting sport for young people

Instruction: Have students work in groups and individually to develop lists of ways that selected readings are alike and different.

English: Reading/Literature and Research Test



A. Standard of Learning: 7.6 The student will read and understand information from varied sources.

b) Make, confirm, or revise predictions as needed.

Builds To: Work with prediction continues throughout the study of Reading/Literature and Research and increases in complexity.

A

10 According to Kim Park's letter, which of the following is she *most* likely to do next?

F Move to a town that allows street basketball

G Circulate a petition encouraging a ban on street basketball

H Organize a neighborhood meeting to discuss the issue

J Install a basketball hoop in her own driveway

Instruction: Discuss and model prediction as a reading strategy and afford students opportunities to make, confirm, and revise predictions.

B. Standard of Learning: 7.6 The student will read and understand information from varied sources.

c) Distinguish fact from opinion in newspapers, magazines, and other print media.

Builds To: The study of persuasive and factual writing continues throughout the Reading/Literature and Research curriculum to enhance students' ability to discern fact from opinion.

B

11 Which of these is a *fact* stated in Kim Park's letter?

A "... we can negotiate safer, ... ways to play and live together."

B "... uniforms are not required (for street basketball games)."

C "... street basketball helps foster a sense of community."

D "... (outlawing) street basketball would cause unnecessary hardship. . ."

Instruction: Have students examine reading materials for examples of factual and opinionated statements.

English: Reading/Literature and Research Test



A. Standard of Learning: 8.4 The student will comprehend what is read from a variety of sources.

b) Analyze details for relevance and accuracy.

Builds To: Work with relevance and accuracy continues throughout the study of Reading/Literature and Research and increases in complexity.

A

12 Which detail in Kim Park's letter *best* supports her argument?

- F Basketball is a popular and fast-paced sport.
- G Street basketball helps foster a sense of community.
- H Trash receptacles could be installed.
- J Street basketball games are played outdoors.

Instruction: Provide students opportunities to examine the relevance and accuracy of details in a variety of printed materials.

B. Standard of Learning: 8.6 The student will analyze mass media messages.

c) Evaluate advertisements, editorials, and feature stories for relationships between intent and factual content.

Builds To: Analysis of mass media continues throughout the Reading/Literature and Research curriculum to enhance students' ability to discern fact from opinion.

B

13 Tony Pérez's argument would have been more convincing if he had added information about —

- A efforts to collect additional litter
- B players harmed by oncoming traffic
- C neighborhood discussions with players
- D bicycle paths in the neighborhood

14 In her letter, Kim Park tries to convince the reader by —

- F naming the city's supporters of street basketball
- G defining the issues associated with the sport
- H comparing street basketball to a neighborhood problem
- J listing the positive aspects of street basketball

Instruction: Provide students opportunities to analyze mass media in a variety of written and non-print materials.

E

nglish: Reading/Literature and Research Test



Reporting Category: Understand elements of literature.

A. Standard of Learning: 7.5 The student will read a variety of fiction, nonfiction, and poetry.

b) Analyze relationship between author's style, literary form, and intended impact on reader.

Builds To: Analysis of the relationship among author's style, literary form, and intended impact on the reader continues throughout the study of Reading/Literature and Research and increases in complexity.

A

15 Which words from Mr. Pérez's letter *best* convey his intent to influence the reader's attitude toward street basketball?

- A Neighborhoods, residents, children
- B Inconvenienced, problem, concern
- C Exciting, oncoming, littering
- D Acute, suddenly, fortunate

Instruction: Have students analyze a variety of prose and poetry to determine the impact of an author's word choice on the reader.

English: Reading/Literature and Research Test



RELEASED ▼ SELECTION

The Dinner Party

Mona Gardner

- 1 The country is India. A colonial official and his wife are giving a large dinner party. They are seated with their guests — army officers, and government attachés with their wives, and a visiting American naturalist — in their spacious dining room. It has a bare marble floor, open rafters, and wide glass doors opening onto a veranda.
- 2 A spirited discussion springs up between a young girl who insists that women have outgrown the jumping-on-a-chair-at-the-sight-of-a-mouse era and a colonel who says that they haven't.
- 3 "A woman's unfailing reaction in any crisis," the colonel says, "is to scream. And while a man may feel like it, he has that ounce more of nerve control than a woman has. And that last ounce more is what counts."
- 4 The American does not join in the argument but watches the other guests. As he looks, he sees a strange expression come over the face of the hostess. She is staring straight ahead, her muscles contracting slightly. With a slight gesture, she summons the native boy standing behind her chair and whispers to him. The boy's eyes widen, and he quickly leaves the room.
- 5 Of the guests, none except the American notices this or sees the boy place a bowl of milk on the veranda just outside the open doors.
- 6 The American comes to with a start. In India, milk in a bowl means only one thing—bait for a snake. He realizes there must be a cobra in the room. He looks up at the rafters — the likeliest place — but they are bare. Three corners of the room are empty, and in the fourth the servants are waiting to serve the next course. There is only one place left — under the table.
- 7 His first impulse is to jump back and warn the others, but he knows the commotion would frighten the cobra into striking. He speaks quickly, the tone of his voice so arresting that it sobers everyone.
- 8 "I want to know just what control everyone at this table has. I will count to three hundred — that's five minutes — and not one of you is to move a muscle. Those who move will forfeit fifty rupees. Ready!"
- 9 The twenty people sit like stone images while he counts. He is saying "two hundred and eighty" when, out of the corner of his eye, he sees the cobra emerge and make for the bowl of milk. Screams ring out as he jumps to slam the veranda doors safely shut.
- 10 "You were right, Colonel!" the host exclaims. "A man has just shown us an example of perfect control."
- 11 "Just a minute," the American says, turning to his hostess. "Mrs. Wynnes, how did you know the cobra was in the room?"
- 12 A faint smile lights up the woman's face as she replies. "Because it was crawling across my foot."

"The Dinner Party" by Mona Gardner, © 1942, 1970 by SATURDAY REVIEW, reprinted by permission of Bill Berger Associates, Inc.

E

English: Reading/Literature and Research Test



Reporting Category: Understand elements of literature.

A. Standard of Learning: 6.4 The student will read a variety of fiction (realistic, fantasy, historical, and biographical) and nonfiction (expository and argumentative).

c) Distinguish between first- and third-person point of view.

Builds To: Work with point of view continues throughout the study of Reading/Literature and Research and increases in complexity.

A

16 The use of third-person point of view in this story makes the reader feel like a —

F participant
G relative
H spectator
J friend

Instruction: Provide students with samples of selections written from various points of view and have them identify the characteristics of each, and the impact on the reader.

B. Standard of Learning: 7.5 The student will read a variety of fiction, nonfiction, and poetry.

a) Describe setting, plot structure, and theme or conflict.

Builds To: Work with setting, plot structure, and theme/conflict continues throughout the study of Reading/Literature and Research and increases in complexity.

B

17 What is the initiating event for this story?

A The American's challenge for the guests to keep still

B The change in expression on the face of the hostess

C The Indian boy placing milk on the veranda

D The guests screaming as the veranda doors close

18 Which detail about the setting contributes to the plot of the story?

F The plant life in India is very exotic.

G India is located in Southern Asia.

H India is the second-most populous country in the world.

J Cobras live in India.

Instruction: Have students identify the setting and plot structure in material they have read as a group and individually.

English: Reading/Literature and Research Test



A. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

a) Explain the use of symbols and figurative language.

Builds To: Work with symbols and figurative language continues throughout the study of Reading/Literature and Research and increases in complexity.

A

19 What does the author mean by the phrase "jumping-on-a-chair-at-the-sight-of-a-mouse" in paragraph 2?

- A An appropriate activity
- B A quick movement
- C A fearful reaction
- D An athletic response

20 What does the author mean by the phrase "like stone images" in paragraph 9?

- F As large as statues
- G Without moving
- H Appearing to shift
- J Without any life

Instruction: Provide students opportunities to identify and paraphrase figurative language in a variety of prose and poetry.

B. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

b) Describe inferred main ideas or themes.

Builds To: Inferring the main idea or theme continues throughout the study of Reading/Literature and Research and increases in complexity.

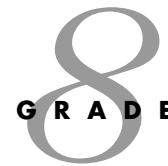
B

21 What is a theme of this story?

- A A calm reaction to a crisis is the best choice.
- B Beware of snakes under the dinner table.
- C Men usually react better in a crisis situation.
- D A large group of guests can be difficult to manage.

Instruction: Provide students many opportunities to identify main ideas and themes in various literary works.

English: Reading/Literature and Research Test



A. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

c) Describe cause-effect relationships and their impact on plot.

Builds To: Work with cause-effect relationships and their impact on plot continues throughout the study of Reading/Literature and Research and increases in complexity.

A

22 Why is the hostess's reaction to the snake important to the story?

- F The character of the native boy is introduced.
- G It offers proof to end the discussion.
- H She is able to focus on her guests.
- J It reinforces the colonel's view.

Instruction: Provide students opportunities to determine the impact of cause-effect relationships on the plots of various literary works.

B. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

d) Describe how authors use characters, point of view, and tone to create meaning.

Builds To: Work with characteristics and elements of literature continues throughout the study of Reading/Literature and Research and increases in complexity.

B

23 How would the story have been different if it had been told from the hostess's point of view?

- A Readers would have been aware of the snake's location earlier.
- B The story would have been much more dramatic.
- C Readers would not have known why the milk was placed outside.
- D The story would have included a description of the dinner menu.

Instruction: Have students examine and rewrite stories by changing the point of view from one character to another or from 1st person to 3rd person. Also have them discuss the differences between the original and rewritten versions.

English: Reading/Literature and Research Test

8

GRADE

RELEASED ▼ SELECTION

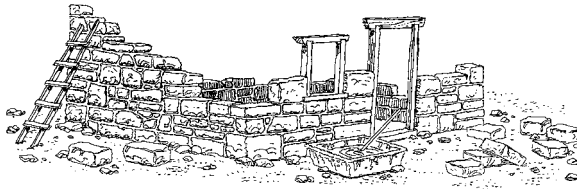
The Homesteader

He builds the walls of his house
One stone at a time,
Choosing them carefully
To fit the space.

5 He refuses to work with tools,
Trusting his bare hands
To daub in the mortar
And smooth it into the crevices.

In his dreams
10 He is building a castle
In the days of King Arthur,
But the stones are much larger,
And many men work on it.

Nowadays he works alone,
15 Concerned that the first norther of winter
Will blow in before the walls are up.
The walls, the roof
Must be in place
Before the wolf that is winter
20 Shows its fangs.
His makeshift tent
Will not withstand an icy blast.
And he has, after all,
No other place to go.



English: Reading/Literature and Research Test



Reporting Category: Understand a variety of printed materials/resource materials.

A. Standard of Learning: 6.5 The student will demonstrate comprehension of a variety of selections.

d) Draw conclusions and make inferences based on explicit and implied information.

Builds To: Comprehension of increasingly complex text.

A

24 From lines 1 through 8, the reader can conclude that the homesteader is a person who —

F dreams more than he works
 G is afraid of wolves
 H is careful and diligent in his work
 J does not like cold weather

Instruction: Provide students opportunities to draw conclusions and to generate inferences about characters in a variety of written materials.

B. Standard of Learning: 7.10 The student will apply knowledge of resources in preparing written and oral presentations.

a) Use print and electronic sources to locate book and articles.

Builds To: Independent use of resources such as an encyclopedia, a thesaurus, on-line databases, on-line library catalogs.

B

25 This poem could *best* be found in an anthology titled —

A *Poems About Animals*
 B *Trains, Boats, and Planes*
 C *One Hundred Rhyming Poems*
 D *Hard Times and High Hopes*

Instruction: Have students examine and create anthologies of stories, essays, and/or poetry arranged by theme.

English: Reading/Literature and Research Test



A. Standard of Learning: 8.2 The student will apply knowledge of word origins, derivations, and idioms and will use analogies, metaphors, and similes to extend vocabulary development.

Builds To: Work with methods to enhance vocabulary development continues throughout the study of Reading/Literature and Research and increases in complexity.

A

26 A "norther" is probably a —

- F person who comes from a northern land
- G cold wind that blows in from the north
- H group of homesteaders traveling north
- J house that has a northern view

Instruction: Provide opportunities for the use of context clues and the exploration of word origins, derivations, and idioms. Also, have students use analogies, metaphors, and similes to extend vocabulary.

Reporting Category: Understand elements of literature.

B. Standard of Learning: 6.6 The student will read and write a variety of poetry.

a) Describe the visual images created by language.

Builds To: Work with visual imagery continues throughout the study of Reading/Literature and Research and increases in complexity.

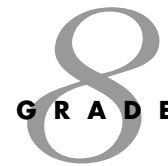
B

27 In line 21, the poet calls the tent "makeshift" to help the reader visualize a structure that is —

- A able to occupy a small space
- B used to store building materials
- C made of flexible fabric
- D just a temporary shelter

Instruction: Have students visualize and paraphrase poetry and prose.

English: Reading/Literature and Research Test



A. Standard of Learning: 7.5 The student will read a variety of fiction, nonfiction, and poetry.

a) Describe setting, plot structure, and theme or conflict.

Builds To: Work with setting, plot structure, and theme/conflict continues throughout the study of Reading/Literature and Research and increases in complexity.

A

28 This poem takes place —

- F in a large city
- G in medieval England
- H on a busy construction site
- J in a remote area

29 The homesteader's main problem in this poem is that he —

- A has to finish building his house, alone, before winter sets in
- B is building his house in an area where there are wolves
- C has just moved to a new place by himself and he feels lonely
- D spends too much time daydreaming instead of working

Instruction: Have students identify settings and plot structures in poetry and prose.

A. Standard of Learning: 7.5 The student will read a variety of fiction, nonfiction, and poetry.

b) Analyze relationship between author's style, literary form, and intended impact on reader.

Builds To: Analysis of the relationship among author's style, literary form, and intended impact on the reader continues throughout the study of Reading/Literature and Research and increases in complexity.

B

30 This poem appeals *primarily* to a reader's need for —

- F shelter and safety
- G daydreams and imagination
- H knowledge and learning
- J remembering the past

Instruction: Have students analyze, discuss, and mimic the author's craft (choice of words, imagery, literary form) and its impact on the reader.

English: Reading/Literature and Research Test

A. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

a) Explain the use of symbols and figurative language.

Builds To: Work with symbols and figurative language continues throughout the study of Reading/Literature and Research and increases in complexity.

A

31 In the last stanza, winter is compared to —

- A a brave knight
- B an ice wall
- C a fierce animal
- D a temporary dwelling

Instruction: Provide students opportunities to identify symbols and paraphrase figurative language.

B. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

b) Describe inferred main ideas or themes.

Builds To: Inferring the main idea or theme continues throughout the study of Reading/Literature and Research and increases in complexity.

B

32 What is the main idea of this poem?

- F Until their homes are built, homesteaders live in makeshift tents.
- G King Arthur's castle was built by many men working together.
- H Homesteading is a life of loneliness, risk, and hard work.
- J It is foolish to refuse to use tools when you must build a house quickly.

Instruction: Provide students opportunities to identify main ideas and themes in a variety of prose and poetry.

English: Reading/Literature and Research Test



A. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

d) Describe how authors use characters, point of view, and tone to create meaning.

Builds To: Work with characteristics and elements of literature continues throughout the study of Reading/Literature and Research and increases in complexity.

A

33 The poet's description of the homesteader presents him as a person who is —

- A independent
- B destructive
- C thoughtless
- D reckless

Instruction: Have students analyze characters in novels, stories, and poetry.

B. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

e) Compare and contrast the use of the poetic elements of word choice, dialogue, rhyme, rhythm, and voice.

Builds To: Work with poetic elements continues throughout the study of Reading/Literature and Research and increases in complexity.

B

34 The author uses the word "Nowadays" in the first line of the third stanza to suggest that the homesteader —

- F is building a modern house
- G has experienced a change of some kind
- H is a newcomer to this area
- J has just begun his current project

Instruction: Have students practice word choice, dialogue, rhyme, rhythm, and voice by writing poetry and prose frequently.

English: Reading/Literature and Research Test

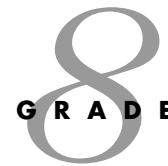


RELEASED ▼ SELECTION

The New Schoolmaster

- 1 The summer afternoon was warm and sticky. Jonathan Cranwell sat on a hard bench behind the long narrow desk and watched the flies flit lazily in the sun. The droning voices of the younger boys chanting letters and the older boys reciting Latin verbs made him sleepy. Jonathan had to force his eyes to stay open. He sighed. He didn't see the use of most of his studies. He had already memorized all his lessons and read most of the books in his father's study. He wanted to take on the new world of 1755. He wanted to learn something new!
- 2 He looked up at the schoolmaster's high desk in the front of the room. The new teacher was from Harvard College. Jonathan's father had been impressed with him, but so far to Jonathan he seemed just like all the other schoolmasters. The boys had already had several other teachers, men who taught them their lessons day after day, but none of them seemed to inspire Jonathan. So far, there was nothing to show that this one was special, though he'd only been there two days.
- 3 The schoolmaster was coming around his desk. "It's too hot to sit and memorize lessons," he said, looking straight at Jonathan. "It's a good time to begin our nature studies. We'll move outdoors for the next part of our lesson." He led the group of boys into the schoolyard. "You younger lads, dig for grubs and beetles. Count their feet. See if you can describe their shells."
- 4 Jonathan watched the teacher surrounded by laughing young students. No one had ever used the schoolyard itself for a classroom. "What next?" he thought. Soon he didn't have time to think about the younger boys, for he was chasing butterflies and dragonflies himself. When the class finally went inside, the older boys were ready to follow the instructions to study the insects they had captured.
- 5 Jonathan and his friends liked this new way of learning. They began to see that their education didn't stop when they went home after the school day.
- 6 "It will be a clear night tonight. Go outside and look at the sky," said the schoolmaster. "Look at the stars and notice their brightness and the patterns they make. These patterns have names from Greek mythology, names like Orion, Aries, and others. Tomorrow we will learn about the ancient stories connected with these names."
- 7 "How is the new schoolmaster?" asked Jonathan's father that evening, when Jonathan announced he was going out to look at the sky.
- 8 "He's different from any schoolmaster we've had," Jonathan admitted. "He seems interested in everything around him, and he wants us to be curious too. He even used the schoolyard as a classroom!"
- 9 "So Mr. John Adams and his new ways make school useful to you after all," teased Jonathan's father.
- 10 "I believe he has," said Jonathan. "I know I won't forget the lessons he has taught us!"
- 11 EPILOGUE: Some years later, John Adams went on to become a lawyer, a member of the Continental Congress, an ambassador to France, and the first United States Ambassador to England. He was the first Vice President and the second President of the United States.

English: Reading/Literature and Research Test



Reporting Category: Understand a variety of printed materials/resource materials.

A. Standard of Learning: 6.5 The student will read and learn the meanings of unfamiliar words.

c) Use context clues to read unfamiliar words.

Builds To: Work with context clues continues throughout the study of Reading/Literature and Research and increases in complexity.

A

35 What does the word droning mean in paragraph 1 of this story?

- A Distinct sounds
- B Monotonous murmuring
- C Enthusiastic responses
- D Loud noises

Instruction: Provide students opportunities to determine the meaning of unfamiliar words by using context clues provided in text.

B. Standard of Learning: 6.5 The student will read and learn the meanings of unfamiliar words.

d) Draw conclusions and make inferences based on explicit and implied information.

Builds To: Comprehension of increasingly complex text.

B

36 When Jonathan's father said, "So Mr. John Adams and his new ways make school useful to you after all," the reader can conclude that —

- F Mr. Cranwell had met him
- G Jonathan had previously complained about school
- H Mr. Cranwell had gone to Harvard College
- J Jonathan had shown his father his homework

37 The students' laughter in paragraph 4 suggests that they were —

- A silly
- B nervous
- C delighted
- D rude

Instruction: Provide students opportunities to discuss, draw conclusions, and generate inferences from a variety of written materials.

English: Reading/Literature and Research Test



A. Standard of Learning: 7.10 The student will apply knowledge of resources in preparing written and oral presentations.

a) Use print and electronic sources to locate books and articles.

Builds To: Independent use of resources such as an encyclopedia, a thesaurus, on-line databases, on-line library catalogs.

A

38 To quickly find more information about the new schoolmaster in the library catalog, you might look under which heading?

F Harvard College
G Cranwell, Jonathan
H U.S. Presidents
J Adams, John

Instruction: Have students identify topics about which they have questions. Have students use both library and computer sources to investigate their topics and report on the results of their research.

B. Standard of Learning: 7.10 The student will apply knowledge of resources in preparing written and oral presentations.

c) Use graphic organizers to organize information.

Builds To: Work with graphic organizers continues throughout the study of Reading/Literature and Research and increases in complexity.

B

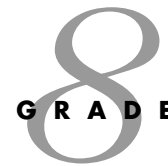
39 Here is a cluster to help you organize information on John Adams.

Which title should go in the blank circle?

A Honors
B Jobs
C Hobbies
D Skills

Instruction: Have students work with a variety of graphic organizers and identify ways each type can be used to organize information.

English: Reading/Literature and Research Test



A. Standard of Learning: 8.4 The student will comprehend what is read from a variety of sources.

b) Analyze details for relevance and accuracy.

Builds To: Work with relevance and accuracy continues throughout the study of Reading/Literature and Research and increases in complexity.

A

40 Which new method of learning does the schoolmaster introduce?

F Reciting

G Chanting

H Memorizing

J Observing

Instruction: Provide students opportunities to identify details and examine them for relevance and accuracy.

Reporting Category: Understand elements of literature.

B. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

b) Describe inferred main ideas or themes.

Builds To: Inferring the main idea or theme continues throughout the study of Reading/Literature and Research and increases in complexity.

B

41 What is the main idea of this story?

A Science is all around us.

B School provides us with the best education.

C Homework is an important part of education.

D There is more than one way to learn.

Instruction: Provide students opportunities to discuss and identify main ideas and themes in various literary works.

E

nglish: Reading/Literature and Research Test



A. Standard of Learning: 8.3 The student will apply knowledge of the characteristics and elements of various literary forms, including short stories, essays, speeches, lyric and narrative poems, plays, and novels.

c) Describe cause-effect relationships and their impact on plot.

Builds To: Work with cause-effect relationships and their impact on plot continues throughout the study of Reading/Literature and Research and increases in complexity.

A

42 Which statement shows that the new schoolmaster understood children?

- F "Go outside and look at the sky, . . ."
- G "See if you can describe their shells."
- H "Tomorrow we will learn about the ancient stories . . ."
- J "It's too hot to sit and memorize lessons, . . ."

Instruction: Provide students opportunities to discuss and determine the impact of cause-effect relationships on the plot of various literary works.

English: Writing Test

8
GRADE

RELEASED ▼ ITEMS

Time Machine

Marta's English teacher has asked the students to write a short story for class.

Before starting to write, Marta made this list. Use it to answer question 1.

1. In a dream I have one night, I invent a time machine.
2. I can't decide which time period to visit, though.
3. Then I start to think about the things that could go wrong while traveling in time.
4. It's just my alarm clock.
5. Feeling adventurous, I decide to get into the time machine anyway.
6. Suddenly I hear beeping and think the time machine isn't working.

Reporting Category: Plan, Compose, and Revise in a Variety of Forms for a Variety of Purposes

A. Standard of Learning: 6.7 The student will write narratives, descriptions, and explanations.

a) Use a variety of planning strategies to generate and organize ideas.

Builds To: High school English requires students to work with planning strategies and organization of ideas in writing.

A

1 Which of these is in the wrong sequence on Marta's list?

- A 1
- B 3
- C 4
- D 6

Instruction: Provide students many opportunities to identify a statement that is out of sequence in a given list.

English: Writing Test



RELEASED ▼ ITEMS

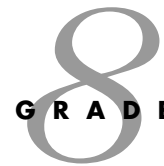
Here is Marta's rough draft of the first part of her story. Use it to answer questions 2–5.

(1)I stepped into my laboratory. (2)The small space was crammed with electronic equipment and glass beakers full of colored liquids, although I had to be careful not to knock anything to the floor. (3)I was so excited about my endeavor that I wouldn't have cared much if I had. (4)After two years of trying each day, I had just invented a time machine!

(5)It's not easy to invent a time machine when you're only thirteen and you have lots of homework every night. (6)Now that I had succeeded, time wouldn't be a problem anymore. (7)The only problem was, where and when in time should I go? (8)The teenage scientist was about to get into her time machine and shut its door behind her when she started to worry. (9)What if I went to the past and did something there that changed the future? (10)What if I went to the future? (11)What if I saw something I didn't want to know yet? (12)Worst of all, what if the time machine broke down?

(13)I paused at the thought of something going wrong. (14)"Don't be silly," I told myself. (15)"You're a scientist. (16)To unravel the mystery of time, here is your chance and you have to take it. (17)You owe it to humanity." (18)I climbed into my contraption and buckled my seat belt.

English: Writing Test



A. Standard of Learning: 6.7 The student will write narratives, descriptions, and explanations.

d) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.

Builds To: High school English requires students to be able to expand and embed ideas in complete sentences.

A

2 How could sentences 10 and 11 *best* be combined without changing their meaning?

- F What if I went to the future, and in the future, what if I saw something I didn't want to know yet?
- G What if I went to the future or yet, saw something I didn't want to know?
- H What if I went to the future and saw something I didn't want to know yet?
- J Seeing something in the future, what if in the future I went and didn't want to know yet?

Instruction: Provide students many opportunities to combine sentences without changing their meaning.

B. Standard of Learning: 6.7 The student will write narratives, descriptions, and explanations.

e) Revise writing for clarity.

Builds To: High school English requires students to revise writing until it is clarified.

B

3 In sentence 2, the word although does *not* correctly link the ideas. Which of these should be used instead?

- A however
- B so
- C meanwhile
- D for instance

4 How is sentence 16 *best* rewritten?

- F You have to take it to unravel the mystery of time, here is your chance.
- G To take your chance and to unravel the mystery of time, you have to.
- H Here is your chance to unravel the mystery of time, and you have to take it.
- J You have to unravel the mystery of time, you have to take your chance.

Instruction: Model revision for students and provide students many opportunities to revise drafts with peer groups and/or independently.

E

nglish: Writing Test

A. Standard of Learning: 8.5 The student will write in a variety of forms, including narrative, expository, and persuasive writings.

e) Revise writing for word choice, appropriate organization, consistent point of view, and transitions among paragraphs.

Builds To: High school English requires students to show consistency in point of view in writing.

A

5 Which of these is a problem with sentence 8?

- A It changes the point of view.
- B It expresses the views of the author.
- C Its language is more technical than the rest of the story.
- D The phrase "when she started to worry" repeats information already given in the sentence.

Instruction: Provide students with many opportunities to identify problems in their drafts and then discuss and revise them.

English: Writing Test



RELEASED ▼ ITEMS

Read the next part of Marta's rough draft and use it to answer questions 6–10. This section has groups of underlined words. The questions ask about these groups of underlined words.

(19)"Your destination, please," the machine asked politely.

(20)"Surprise me," I said. (21)I took another deep breathe and punched the buttons that would start me on the first of my journeys through time. (22)The buttons lit up and the countdown began. (23)Ten, nine, eight, seven —

(24)Beep. (25)Beep. (26)Beep.

(27)"Oh, no! I gasped. (28)I just knew that something was horribly wrong! (29)I tried to see what was causing the beeping sound. (30)It seemed to get louder every second. (31)What was I to do?

(32)"Wake up, Marta!" my sister yelled. (33)"Your alarm clock is blaring, and I can hear them all the way down the hall!"

(34)My alarm clock? (35)I opened my eyes and sat up. (36)I was in my own bed. (37)Just then, I remembered that it was Monday and that I had a big science test in Mr. Smith's class.

(38)At that moment, I would have given anything for a time machine.

Eⁿglish: Writing Test



Reporting Category: Edit for correct Use of Language, Capitalization, Punctuation, and Spelling

A. Standard of Learning: 6.7 The student will write narratives, descriptions, and explanations.

g) Edit final copies for writing mechanics: format, capitalization, punctuation, and spelling.

Builds To: High school English requires students to edit writings for correct use of capitalization, punctuation, and spelling.

A

6 In sentence 21, breathe and punched is correctly written —

- F breathe, and punched
- G breathe and punch
- H breath and punched
- J as it is

8 In sentence 27, “Oh, no! I gasped. is correctly written —

- F “Oh, no! I gasped.”
- G “Oh, no, I gasped.”
- H “Oh, no!” I gasped.
- J as it is

7 In sentence 21, my journeys through time is correctly written —

- A my journies through time
- B my journeys threw time
- C my journey's through time
- D as it is

9 In sentence 37, science test in Mr. Smith's class is correctly written —

- A Science test in Mr. Smiths class
- B science test in Mr. Smiths' Class
- C Science test in Mr. Smiths' Class
- D as it is

Instruction: Model editing for students and provide them many opportunities to edit and correct punctuation, spelling, and capitalization in their own and others' writing.

E

nglish: Writing Test

A. Standard of Learning: 8.5 The student will write in a variety of forms, including narrative, expository, and persuasive writings.

f) Edit final copies to ensure correct use of pronoun case, verb tense inflections, and adjective and adverb comparisons.

Builds To: High school English requires students to use pronouns correctly.

A

10 In sentence 33, I can hear them is correctly written —

- F I can hear you
- G I heard them
- H I can hear it
- J as it is

Instruction: Model correct pronoun usage and provide students many opportunities to correct pronoun usage errors in their own writing and the writing of others.

English: Writing Test

8
GRADE

RELEASED ▼ ITEMS

Theater Intern

Leroy wants to be a stage director someday. He has decided to write a letter to the director of a community theater to ask if he can work there as an intern to learn more about theater.

Reporting Category: Plan, Compose, and Revise in Variety of Forms for a Variety of Purposes

A. Standard of Learning: 8.5 The student will write in a variety of forms, including narrative, expository, and persuasive writings.

a) Use prewriting strategies to generate and organize ideas.

Builds To: High school English requires students to use prewriting strategies for effective writing.

A

11 Which of these methods would be the *most* helpful to Leroy before he begins to write?

- A Deciding how many pages his letter will be
- B Listing the things he wants to include in his letter
- C Signing up for a drama class
- D Looking up words in the dictionary that he wants to use in his letter

Instruction: Provide students many opportunities to determine an appropriate prewriting strategy.

English: Writing Test



RELEASED ▼ ITEMS

Here are two drafts of the first part of Leroy's letter. Use both rough drafts to answer questions 12–15.

DRAFT A.

1846 E. 4th St.
Sarsatley, VA 25206

Dear Mr. Vasquez:

Recently my eighth-grade drama class saw the play *A New World* performed by your theater company. It was the first live play I've seen, other than the ones at school. It was amazing! Would you consider letting me come to your theater to work as an intern three afternoons a week this summer? The actors were great. I especially liked the boy who played Wu Li. He made the audience feel Wu Li's excitement as his family came to America. He also made us feel his regret at leaving his own country. I also liked Nancy Chang as the grandmother. When we read the play aloud in class, I didn't realize how funny her role could be.

I also have a request to make, Mr. Vasquez. I am interested in becoming a director someday. This year I assisted my drama teacher, Mrs. Lyons, in putting on our annual school production. However, a school play can't compare with working with a professional theater company like yours. In return for the work I'd do, I'd like to learn about sound effects, lights, and actors.

English: Writing Test



RELEASED ▼ ITEMS

DRAFT B.

1846 E. 4th St.
Sarsatley, VA 25206

Dear Mr. Vasquez:

Recently my eighth-grade drama class saw the play *A New World*. It was very good. The actors were great. I especially liked the boy who played Wu Li and the woman who played the grandmother. I also liked the set. With only some junk, the stage was made to look like a ship in the first act and a busy seaport in the second.

I have a request to make. I am very interested in becoming a director someday. This year I assisted my drama teacher, Mrs. Lyons, with our annual school production.

However, my school puts on only one play a year. It can't compare with working with a professional theater company. So, I would like to work at your theater company as an intern three afternoons a week. I could help with odd jobs like painting sets and ironing costumes. I'd also like to learn about working with sound effects, lights, and actors.

English: Writing Test

A. Standard of Learning: 8.5 The student will write in a variety of forms, including narrative, expository, and persuasive writings.

b) Focus on elaboration and organization.

Builds To: High school English requires students to use organization in writing and to elaborate on a topic appropriately.

A

12 Which draft is better organized?

- F Draft A, because the tone is more conversational
- G Draft B, because all of the ideas are in an appropriate sequence
- H Draft A, because it contains more information about the play's characters
- J Draft B, because the language is more vivid and specific

14 In both drafts, what is Leroy's main purpose in paragraph 1?

- F To discuss his eighth-grade class
- G To make his letter longer
- H To express how much he liked the play
- J To describe his theater training

13 In either draft, which of these sentences could Leroy add at the end of paragraph 1?

- A I enjoy movies too.
- B A few people in my class didn't like the play.
- C I plan to be in the drama club next year.
- D Thanks for an enjoyable afternoon of theater.

Instruction: Provide students with many opportunities to examine well-organized and correctly written prose including examples of pieces with strong conclusions. Provide many opportunities for students to discuss and apply author's purpose to paragraph writing.

English: Writing Test

A. Standard of Learning: 8.5 The student will write in a variety of forms, including narrative, expository, and persuasive writings.

c) Select specific vocabulary and information.

Builds To: High school English requires students to use specific vocabulary to be descriptive in their writing.

A

15 In Draft B, what is a more descriptive way for Leroy to write some junk?

- A some stuff
- B a few boxes, barrels, and ropes
- C some junky things
- D a few old things that were collected

Instruction: Model appropriate use of descriptive vocabulary and provide students with many opportunities to replace selected words or phrases with more descriptive ones in their own writing or in the writing of others.

English: Writing Test

8
GRADE

RELEASED ▼ ITEMS

Read the next part of Leroy's rough draft and answer questions 16–20. This section has groups of underlined words. The questions ask about these groups of underlined words.

I already have some theater experience from working on the production of *The Story of The Decade*. My duties included choosing the cast and reminding people of their lines during rehearsals. This teach me that putting on a play isn't all glamour, as some people might think. In fact, it's a lot of hard work. In my opinion, though, seeing the curtain rise on opening night makes it all worthwhile.

I am sending along a letter of recommendation from Mrs. Lyons. She was nice enough to write, "Leroy is young, but he's responsible, hardworking, and eager to learn."

Hiring me as an intern has another benefit too. It showed the community that you are committed to helping young people pursue their dreams.

I can be reached at 555-2702. I hope to hear from you soon.

Respectfully yours,

Leroy Jacobs

Leroy Jacobs

English: Writing Test



Reporting Category: Edit for Correct Use of Language, Capitalization, Punctuation, and Spelling

A. Standard of Learning: 8.5 The student will write in a variety of forms, including narrative, expository, and persuasive writings.

f) Edit final copies to ensure correct use of pronoun case, verb tense inflections, and adjective and adverb comparisons.

Builds To: High school English requires students to use the appropriate verb tense correctly in a piece of writing.

A

16 How is This teach me correctly written?

- F This teached me
- G This will teach me
- H This taught me
- J As it is

17 How is It showed the community that you are committed correctly written?

- A It is showing the community that you are committed
- B It would show the community that you are committed
- C It has shown the community that you are committed
- D As it is

Instruction: Model correct verb usage and provide students with many opportunities to correct the verb tense in sentences selected from their own writing or the writing of others.

English: Writing Test

A. Standard of Learning: 8.5 The student will write in a variety of forms, including narrative, expository, and persuasive writings.

g) Edit final copies to ensure correct spelling, capitalization, punctuation, and format.

Builds To: High school English requires students to have writings that contain correct spelling and capitalization.

A

18 How is The Story of The Decade correctly written?

- F The Story of the decade
- G The story of the decade
- H The Story of the Decade
- J As it is

20 How is pursue their dreams correctly written?

- F pursue thier dreams
- G pursue there dreams
- H pursue they're dreams
- J As it is

19 How is dutys included choosing correctly written?

- A dutys included chosing
- B duties included chosing
- C duties included choosing
- D As it is

Instruction: Provide students with many opportunities to correct capitalization, punctuation, and spelling errors in their own writing or that of others.

English: Writing Test



In the direct writing component, students write a composition about a topic presented to them in a writing prompt. The writing prompt page also includes a "Checklist for Writers" that lists points for students to keep in mind as they write. Writing compositions are scored in each of the following domains:

- Composing
- Written Expression
- Usage/Mechanics

Scores in the Composing and Written Expression domains are reported as part of the Reporting Category called **Plan, Compose, and Revise Writing in a Variety of Forms for a Variety of Purposes**. Scores in the Usage/Mechanics domains are reported as part of the Reporting Category called **Edit for Correct Use of Language, Capitalization, Punctuation, and Spelling**. A writing prompt from the Spring 2000 administration is shown below.



Grade 8

ENGLISH: WRITING

PROMPT No. 811

Imagine that the school counselor has asked your class to write a letter to a student who will soon begin middle school. What advice would you give a new middle school student? Be sure to be specific.

CHECKLIST FOR WRITERS

- _____ I planned my paper before writing it.
- _____ I revised my paper to be sure that
 - _____ the introduction captures the reader's attention;
 - _____ the central idea is supported with specific information and examples that will be interesting to the reader;
 - _____ the content relates to my central idea;
 - _____ ideas are organized in a logical manner;
 - _____ my sentences are varied in length;
 - _____ my sentences are varied in the way that they begin; and
 - _____ the conclusion brings my ideas together.
- _____ I edited my paper to be sure that
 - _____ correct grammar is used;
 - _____ words are capitalized when appropriate;
 - _____ sentences are punctuated correctly;
 - _____ paragraphs are clearly indicated.
- _____ I checked my paper.

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Mathematics Test

8

GRADE

Reporting Category: Number and Number Sense

A. Standard of Learning: 7.1 The student will compare, order, and determine equivalent relationships between fractions, decimals, and percents, including scientific notation.

Builds To: High school mathematics courses require students to determine relationships and comparisons between quantities.

A

1 Nelda needed a wrench to fix her bicycle. A $\frac{5}{8}$ inch wrench was too big, and a $\frac{1}{4}$ inch wrench was too small. Which of the following would be bigger than the $\frac{1}{4}$ inch wrench and smaller than the $\frac{5}{8}$ inch wrench?

A $\frac{1}{8}$ inch

B $\frac{1}{2}$ inch

C $\frac{2}{3}$ inch

D $\frac{4}{5}$ inch

Instruction: Provide students an opportunity to determine a fraction between two given fractions in a problem situation.

B. Standard of Learning: 7.2 The student will find common multiples and factors, including least common multiple and greatest common factor.

Builds To: High school mathematics courses require students to apply the concepts of least common multiple and greatest common factor to work with polynomials.

B

2 Lenelle delivers bottled water to stores in White Haven. She delivers to Benton's Bookstore every 6 days and to Sigmund's Cellar every 9 days. On Thursday the 4th, she will deliver water to both of these stores. How many days after that will it be before she must deliver to both stores on the same day again?

S	M	T	W	T	F	S
	1	2	3	4 Benton's Sigmund's	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

F 3
G 15
H 18
J 54

Instruction: Provide students an opportunity to apply knowledge about least common multiples to a problem situation.

Mathematics Test



A. Standard of Learning: 7.3 The student will simplify expressions by using order of operations, mental mathematics, and appropriate tools. Exponents will be included.

Builds To: High school mathematics courses require students to use the order of operations and extend work with exponents.

A

3 What is the value of $64 - 4 \cdot 2^3 + 7$?

A 4

B 25

C 39

D 247

Instruction: Provide students an opportunity to simplify an expression using the order of operations involving exponents.

B. Standard of Learning: 7.4 The student will explain orally and in writing the following properties of operations with real numbers:

- a) the commutative and associative properties for addition and multiplication;
- b) the distributive property;
- c) the additive and multiplicative identity properties;
- d) the additive and multiplicative inverse properties; and
- e) the multiplicative property of zero.

Builds To: High school mathematics courses require students to use the properties of real numbers to justify their steps in solving problems.

B

4 Mrs. Hansen asked Eli to apply the distributive property to the expression, $2(7 + 3)$. Which of the following should Eli have written?

F $2(10)$

G $2(7) + 2(3)$

H $2(3 + 7)$

J $(7 + 3) \cdot 2$

Instruction: Provide students an opportunity to identify an application of the distributive property.

Mathematics Test



A. Standard of Learning: 8.1 The student will use proportions to solve scale-model problems with fractions and decimals.

Builds To: High school mathematics courses require students to use proportions to solve problems.

A

- 5 A rectangular photograph measured 7.5 centimeters wide and 10.0 centimeters long. An enlargement was made that was 22.5 centimeters wide. How long was the enlargement?

A 17.5 cm
B 30.0 cm
C 75.0 cm
D 225.0 cm

- 6 Jimmy built a scale model of an airplane. The scale used was $\frac{1}{4}$ inch to 1 foot. The actual length of the midsection of the plane was 92 feet. What was the length of the midsection of the model?

F 747 in.
G 368 in.
H 92 in.
J 23 in.

Instruction: Provide students an opportunity to solve a scale-model problem when given the scale; and to use a proportion to determine the new length in an enlargement.

B. Standard of Learning: 8.2 The student will simplify numerical expressions involving exponents, using order of operations.

Builds To: High school mathematics courses require students to use the order of operations and exponents.

B

- 7 Which is equivalent to $(7 - 3)^2$?

A 316
B 64
C 12
D 4

Instruction: Provide students an opportunity to simplify expressions using the order of operations involving exponents.

Mathematics Test



A. Standard of Learning: 8.3 The student will describe orally and in writing the relationship between the subsets of the real number system.

Builds To: High school mathematics courses require students to know and use the subsets of real numbers.

A

8

-6

Which statement about the number in the box is *not* true?

F The number is a rational number.
 G The number is an integer.
 H The number is a real number.
 J The number is an irrational number.

Instruction: Provide students an opportunity to identify the subsets to which a given number belongs and the subsets to which it does not belong.

Reporting Category: Computation and Estimation

B. Standard of Learning: 6.7 The student will use estimation strategies to solve multi-step practical problems involving whole numbers, decimals, and fractions.

Builds To: High school mathematics courses require students to use estimation strategies to determine the reasonableness of results.

B

9 Carleton works between $\frac{3}{4}$ hour and $2\frac{1}{2}$ hours after school Monday through Friday. If he is paid \$6.25 per hour, which is the *best* estimate of the amount he will earn in one month?

A \$20
 B \$100
 C \$180
 D \$370

Instruction: Provide students an opportunity to estimate an answer to a multi-step problem containing fractions and money.

Mathematics Test



A. Standard of Learning: 7.5 The student will solve consumer application problems involving tips, discounts, sales tax, and simple interest, using whole numbers, fractions, decimals, and percents.

Builds To: High school mathematics courses require students to apply consumer application skills to more complex problem-solving situations.

A

- 10 Amy's mother ordered a pizza to be delivered to their home. The bill for the pizza was \$18. She gave the delivery man a 15% tip. How much was the tip?

F \$0.27
G \$1.50
H \$1.80
J \$2.70

Instruction: Provide students an opportunity to calculate the tip in a consumer application problem.

B. Standard of Learning: 7.7 The student will use proportions to solve practical problems, including scale drawings that contain whole numbers, fractions, decimals, and percents.

Builds To: High school mathematics courses require the use of proportions to solve problems.

B

- 11 An interior designer made a scale model of a room. Each 1 inch in the model represented 12 feet in the actual room. If the length of a hall was $2\frac{1}{4}$ inches in the model, what was the actual length of the hall?

A $8\frac{1}{4}$ ft
B $13\frac{1}{2}$ ft
C $16\frac{1}{2}$ ft
D 27 ft

Instruction: Provide students an opportunity to determine the actual length of objects in practical problems when given the scale.

Mathematics Test



A. Standard of Learning: 8.4 The student will solve practical problems involving whole numbers, integers, and rational numbers, including percents. Problems will be of varying complexities, involving real-life data.

Builds To: High school mathematics courses require students to use the problem-solving skills with percents in more complex situations.

A

12 A company ordered 328 pens with the company logo printed on them. The company returned 82 of the pens because the wrong logo was printed on them. What percent of the original order did the company *keep*?

F 25%

G $33\frac{1}{3}\%$

H 75%

J 246%

Instruction: Provide students an opportunity to determine the percent in a practical problem situation.

B. Standard of Learning: 8.5 The student will apply the order of operations to evaluate algebraic expressions for given replacement values of the variables.

Builds To: High school mathematics courses require students to evaluate algebraic expressions using the order of operations.

B

13 What is the value of $7a(a - 1) + 6$ when $a = 2$?

A 20

B 33

C 54

D 98

Instruction: Provide students an opportunity to evaluate expressions for given replacement values for the variables while applying the order of operations.

Mathematics Test



A. Standard of Learning: 8.6 The student, given a whole number from 0 to 100, will identify it as a perfect square or find the two consecutive whole numbers between which the square root lies.

Builds To: High school mathematics courses require students to work with square roots.

- | | |
|---|--|
| <p>A</p> <p>14 Which of these numbers is a perfect square?</p> <p>F 12</p> <p>G 24</p> <p>H 36</p> <p>J 48</p> | <p>15 Between which two consecutive whole numbers will you find $\sqrt{82}$?</p> <p>A 6 and 7</p> <p>B 7 and 8</p> <p>C 8 and 9</p> <p>D 9 and 10</p> |
|---|--|

Instruction: Provide students an opportunity to locate the square root between two whole numbers and to identify perfect squares.

Reporting Category: Measurement and Geometry

B. Standard of Learning: 6.9 The student will compare and convert units of measures for length, weight/mass, and volume within the U.S. Customary system and within the metric system and estimate conversions between units in each system.

c) liquid volume—cups, pints, quarts, gallons, milliliters, and liters.

* The intent of this standard is for students to make “ballpark” comparisons and not to memorize conversion factors between U.S. and metric units.

Builds To: High school mathematics courses require students to apply knowledge of measurements to more complex problem-solving situations.

- | |
|--|
| <p>B</p> <p>16 Mrs. Thomas made 4 quarts of strawberry jelly. This amount is the same as —</p> <p>F 1 cup</p> <p>G 1 pint</p> <p>H 1 gallon</p> <p>J 1 milliliter</p> |
|--|

Instruction: Provide students an opportunity to convert within the U.S. Customary system between quarts and gallons.

Mathematics Test

8
GRADE

A. Standard of Learning: 6.12 The student will create and solve problems by finding the circumference and/or area of a circle when given the diameter or radius. Using concrete materials or computer models, the student will derive approximations for pi from measurements for circumference and diameter.

Builds To: High school mathematics courses require students to work with circles in more complex problem-solving situations.

A

- 17 Circle A has a diameter of 6 feet. The area of circle A is closest to —

A 18.84 sq ft
B 28.26 sq ft
C 37.70 sq ft
D 113.04 sq ft

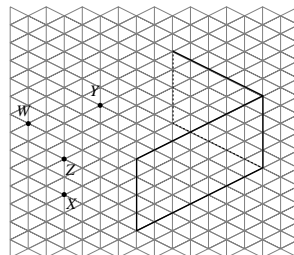
Instruction: Provide students an opportunity to find the area of a circle when given the diameter.

B. Standard of Learning: 6.17 The student will sketch, construct models, and classify rectangular prisms, cones, cylinders, and pyramids.

Builds To: High school mathematics courses require students to construct three-dimensional models for problem-solving situations.

B

- 18 Complete this sketch of a rectangular prism.



Which point lies on an edge of the prism?

F W
G X
H Y
J Z

Instruction: Provide students an opportunity to complete the sketch of a rectangular prism using isometric graph paper.

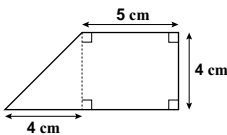
Mathematics Test

GRADE 8

A. Standard of Learning: 7.8 The student, given appropriate dimensions, will estimate and find the area of polygons by subdividing them into rectangles and right triangles.

Builds To: High school mathematics courses require students to be able to subdivide complex figures to find the area.

A 19



What is the area of this figure?

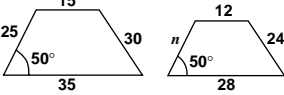
A 18 cm^2
 B 26 cm^2
 C 28 cm^2
 D 36 cm^2

Instruction: Provide students an opportunity to find the area of a polygon that has been subdivided into a rectangle and triangle.

B. Standard of Learning: 7.12 The student will determine if geometric figures (quadrilaterals and triangles) are similar and write proportions to express the relationships between corresponding parts of similar figures.

Builds To: High school mathematics courses require students to apply the concept of similarity to more complex problem-solving situations.

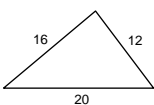
B 20



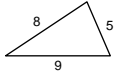

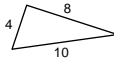

These figures are similar. What is the length of side n ?

F 20
 G 18
 H 16
 J 15

21



Which triangle is similar to the one above?

A 
 B 
 C 
 D 

Instruction: Provide students an opportunity to determine if two triangles are similar and to find the length of a side in similar quadrilaterals using proportions.

Mathematics Test



A. Standard of Learning: 7.13 The student will construct a three-dimensional model using cubes, given the top, side, and/or bottom views, and determine the volume and surface area of the model.

Builds To: High school mathematics courses require students to apply the concepts of volume and surface area to more complex problem-solving situations.

A

22

Top

Front

Side

This shows 3 different views of a three-dimensional figure constructed from cubes. Which could be this figure?

F

G

H

J

Instruction: Provide students an opportunity to determine a three-dimensional model with cubes when given the top, side, and front views.

Mathematics Test

8

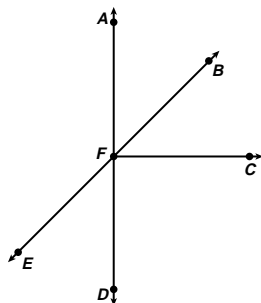
GRADE

A. Standard of Learning: 8.7 The student will verify by measuring and describe the relationships between vertical angles and angles that are supplementary and complementary.

Builds To: High school mathematics courses require the students to apply the relationships among angles to more complex problem-solving situations.

A

- 23 In the diagram below, \overleftrightarrow{AD} is perpendicular to \overleftrightarrow{FC} .



Which pair is complementary?

- A $\angle AFB$ and $\angle BFC$
 B $\angle AFB$ and $\angle BFD$
 C $\angle AFB$ and $\angle EFA$
 D $\angle BFC$ and $\angle CFD$
- 24 If $\angle QRS$ and $\angle XYZ$ are supplementary, which *must* be true?
- F The sum of the measures of the angles is 90° .
 G The sum of the measures of the angles is 180° .
 H Both angles can measure between 90° and 180° .
 J Both angles must measure less than 90° .
- 25 Which of the following is *always* true?
- A If two angles are vertical angles, the sum of their measures is 90° .
 B If two angles are vertical angles, the sum of their measures is 180° .
 C If two angles are vertical angles, one measures more than 90° and one measures less than 90° .
 D If two angles are vertical angles, each has the same measure.

Instruction: Provide students an opportunity to identify complementary angles in a diagram that identifies perpendicularity; to identify a definition of vertical angles; and to identify a definition for supplementary angles.

Mathematics Test

8

GRADE

A. Standard of Learning: 8.8 The student will investigate and solve problems involving volume and surface area of cones and pyramids, using concrete materials and practical situations.

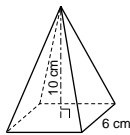
Builds To: High school mathematics courses require students to apply the concepts of volume and surface area to more complex problem-solving situations.

B. Standard of Learning: 8.9 The student will apply transformations (rotate or turn, reflect or flip, translate or slide, and dilate or scale) to geometric figures represented on graph paper. The student will identify applications of transformations such as tiling, fabric design, art, and scaling.

Builds To: High school mathematics courses require students to use transformations in more complex problem-solving situations.

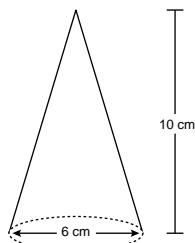
A

- 26 What is the volume of the square-based pyramid shown below?



- F 20 cm^3
 G 60 cm^3
 H 120 cm^3
 J 360 cm^3

27



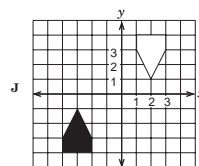
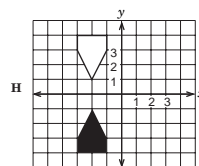
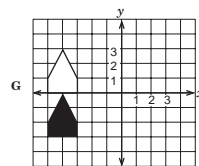
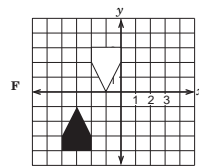
Which of the following is *closest* to the volume of this circular cone?

- A 94.2 cm^3
 B 282.6 cm^3
 C 376.8 cm^3
 D $1,130.4 \text{ cm}^3$

Instruction: Provide students with opportunities, with the aid of the formula sheet, to determine the volume of a pyramid and the volume of a cone.

B

- 28 In which graph is the white figure a reflection of the dark figure over the x -axis?



Instruction: Provide students an opportunity to identify an object reflected over the x -axis.

Mathematics Test

8

GRADE

A. Standard of Learning: 8.10 The student will describe, classify, and construct plane figures and solid figures, including prisms, pyramids, cylinders, and cones.

Builds To: High school mathematics courses require students to use information about plane and solid figures in more complex problem-solving situations.

A

29 The largest angle in $\triangle ABC$ measures 104° . What kind of triangle is $\triangle ABC$?

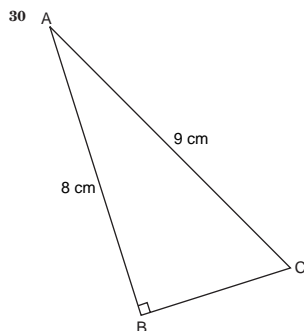
- A Equiangular
- B Obtuse
- C Right
- D Acute

Instruction: Provide students an opportunity to classify a triangle based on angle measure.

B. Standard of Learning: 8.11 The student will verify the Pythagorean Theorem by measuring and then applying the Pythagorean Theorem to find the missing length of a side of a right triangle when the lengths of the other two sides are given.

Builds To: High school mathematics courses require students to use the Pythagorean Theorem in more complex problem-solving situations.

B



What is the length of \overline{BC} ?

- F 3 cm
- G 7 cm
- H $\sqrt{17}$ cm
- J $\sqrt{115}$ cm

Instruction: Provide students with an opportunity to use the Pythagorean Theorem to determine the length of a side of a right triangle, given the hypotenuse and the other side.

Mathematics Test


8
GRADE

Reporting Category: Probability and Statistics

A. Standard of Learning: 6.20 The student will determine and interpret the probability of an event occurring from a given sample space.

Builds To: High school mathematics courses require students to apply the concept of probability to more complex problem-solving situations.

A 31



The basket contains 30 apples, 20 pears, and 10 peaches. What is the probability that the first piece of fruit taken from the basket will be a peach?

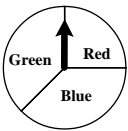
A $\frac{1}{2}$
 B $\frac{1}{3}$
 C $\frac{1}{5}$
 D $\frac{1}{6}$

Instruction: Provide students an opportunity to determine a sample space and the probability of an event occurring.

B. Standard of Learning: 7.17 The student will determine the probability of a given simple event and express that probability as a ratio, decimal, or a percent as appropriate for the given situation.

Builds To: High school mathematics courses require students to use the appropriate representation of probability in more complex problem-solving situations.

B 32 When this spinner is spun, about what percent of the time should it land on the space labeled "Red"?



F 45%
 G 40%
 H 35%
 J 25%

Instruction: Provide students an opportunity to determine the probability of a given simple event and express the probability as a percent.

Mathematics Test



A. Standard of Learning: 7.18 The student will identify and describe the number of possible arrangements of several objects, using a tree diagram or the Basic Counting Principle.

Builds To: High school mathematics courses require students to use the concepts of combinations and permutations.

A

33 The cafeteria offers 3 different meats, 4 different vegetables, 5 different desserts and 2 different drinks for lunch. How many different meals consisting of 1 meat, 1 vegetable, 1 dessert, and 1 drink are offered?

- A 14
- B 49
- C 70
- D 120

Instruction: Provide students an opportunity to identify the number of possible combinations using a tree diagram or the Basic Counting principle.

B. Standard of Learning: 7.19 The student will create and solve problems involving the mean, median, mode, and range of a set of data.

Builds To: High school mathematics courses require students to make comparisons with these measures of central tendency.

B

34 Jorge has test scores of 82, 79, 72, and 78. What is the least score he can make on the next test if he wishes to have an average (mean) score of 80?

- F 92
- G 90
- H 89
- J 88

35 This is a list of the number of minutes each member of a study group spent studying for a test.

75 40 15 0 60 50 120 90 90 20

What was the median number of minutes spent studying for the test by the group?

- A 50
- B 55
- C 56
- D 60

Instruction: Provide students an opportunity to determine the number necessary for attaining a given mean; and to identify the median in a set of numbers given in context.

Mathematics Test



A. Standard of Learning: 7.20 The student will display data, using frequency distributions, line plots, stem-and-leaf plots, box-and-whisker plots, and scattergrams.

Builds To: High school mathematics courses require the use and interpretation of statistical displays in more complex problem-solving situations.

A

- 36 The list shows the scores made by each member of Jaime's discussion group on the last test.

71 80 62 93 68 87 73 78

Which frequency table correctly displays the information?

F

Interval	Frequency
60-70	2
70-80	4
80-90	2
90-100	1

G

Interval	Frequency
60-69	2
70-79	3
80-89	2
90-99	1

H

Interval	Frequency
65	2
75	3
85	2
95	1

J

Interval	Frequency
60	2
70	4
80	2
90	1

- 37 This is a list of the number of miles driven by each committee member to a regional meeting of the Clean Air Society.

53 57 78 56 72 60 73 94 92 87

Which stem-and-leaf plot correctly displays the information?

A

Stem	Leaf
5	3,6,7
6	0
7	2,3,8
8	7
9	2,4

B

Stem	Leaf
5	3,6,7
6	
7	2,3,8
8	7
9	2,4

C

Stem	Leaf
5	3
6	1
7	3
8	1
9	2

D

Stem	Leaf
5	3
6	0
7	3
8	1
9	2

Instruction: Provide students an opportunity to display data in a frequency table, box-and-whisker plot, and stem-and-leaf plot; and to interpret the relationship between two variables using a scattergram.

Mathematics Test

GRADE 8

A. Standard of Learning: 7.20 The student will display data, using frequency distributions, line plots, stem-and-leaf plots, box-and-whisker plots, and scattergrams.

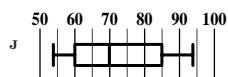
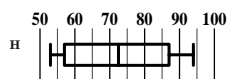
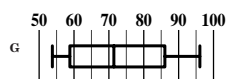
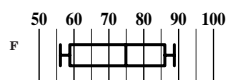
Builds To: High school mathematics courses require the use and interpretation of statistical displays in more complex problem-solving situations.

A

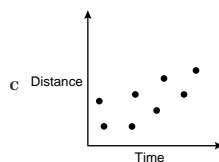
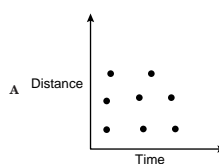
- 38 This is a list of the number of miles driven by each committee member to a regional meeting of the Clean Air Society.

53 57 78 56 72 60 73 94 92 87

Which box-and-whisker plot correctly displays the information?



- 39 Which scatterplot would most likely show the correct relationship between time traveled and distance traveled during an airline flight?



Instruction: Provide students an opportunity to display data in a frequency table, box-and-whisker plot, and stem-and-leaf plot; and to interpret the relationship between two variables using a scattergram.

Mathematics Test

8

GRADE

A. Standard of Learning: 8.13 The student will use information displayed in line, bar, circle, and picture graphs and histograms to make comparisons, predictions, and inferences.

Builds To: High school mathematics courses require students to interpret graphical representations to solve more complex problems.

A

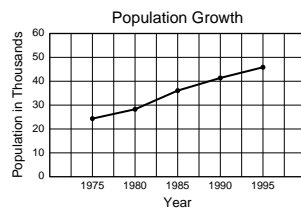
- 40 Each year the church youth group has a car wash and donates the earnings to the food pantry.



Which amount is closest to the mean earnings over this period?

- F \$300
G \$500
H \$700
J \$800

- 41 The graph below shows the population growth of a city over a 20-year period.



Based on the graph, which is the most reasonable prediction of the city's population in the year 2005?

- A 40,000
B 49,000
C 56,000
D 75,000

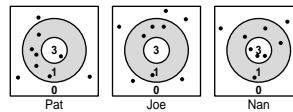
Instruction: Provide students with an opportunity to make a prediction from a line graph; and to determine the mean based on data presented in a bar graph.

B. Standard of Learning: 8.14 The student will use a matrix to organize and describe data.

Builds To: High school mathematics courses require students to perform operations with data displayed in matrices.

B

- 42 Pat, Joe, and Nan each threw 9 darts at the dartboard. Darts landing in the bullseye score points as shown. The drawing shows the results.



Which matrix *best* organizes the ways each player scored points?

Points
0 1 3

F	Pat	$\begin{bmatrix} 3 & 5 & 1 \end{bmatrix}$
	Joe	$\begin{bmatrix} 5 & 4 & 4 \end{bmatrix}$
	Nan	$\begin{bmatrix} 1 & 0 & 3 \end{bmatrix}$

Points
0 1 3

G	Pat	$\begin{bmatrix} 5 & 4 & 0 \end{bmatrix}$
	Joe	$\begin{bmatrix} 3 & 5 & 1 \end{bmatrix}$
	Nan	$\begin{bmatrix} 2 & 4 & 3 \end{bmatrix}$

Points
0 1 3

H	Pat	$\begin{bmatrix} 3 & 4 & 3 \end{bmatrix}$
	Joe	$\begin{bmatrix} 5 & 4 & 1 \end{bmatrix}$
	Nan	$\begin{bmatrix} 5 & 0 & 2 \end{bmatrix}$

Points
0 1 3

J	Pat	$\begin{bmatrix} 3 & 5 & 1 \end{bmatrix}$
	Joe	$\begin{bmatrix} 5 & 4 & 0 \end{bmatrix}$
	Nan	$\begin{bmatrix} 2 & 4 & 3 \end{bmatrix}$

Instruction: Provide students an opportunity to arrange data into a properly labeled matrix.

Mathematics Test



Reporting Category: Patterns, Functions, and Algebra

A. Standard of Learning: 6.22 The student will investigate and describe concepts of exponents, perfect squares, and square roots, using calculators to develop the exponential patterns. Patterns will include zero and negative exponents, which lead to the idea of scientific notation. Investigations will include the binary number system as an application of exponents and patterns.

Builds To: High school mathematics courses require students to work with exponents and square roots in solving more complex problems.

A

43 $5^3 = 125$

$5^2 = 25$

$5^1 = 5$

$5^0 = 1$

$5^{-1} = \frac{1}{5}$

$5^{-2} = \frac{1}{25}$

What is the value of 5^{-4} ?

A $\frac{1}{625}$

B $\frac{1}{125}$

C $\frac{1}{100}$

D $\frac{1}{20}$

Instruction: Provide students an opportunity to extend an established pattern and determine the value of a negative exponent.

B. Standard of Learning: 7.23 The student will write verbal expressions/sentences as algebraic expressions/equations.

Builds To: High school mathematics courses require that the students translate between verbal expressions and algebraic expressions in solving more complex problems.

B

44 Which means "6 times a number minus 7 is 5 more than 4 times that number"?

F $6n - 7 = 4n + 5$

G $6(n - 7) = 4(n + 5)$

H $7 - 6n = 5 + 4n$

J $6(4n + 5) = 7$

Instruction: Provide students an opportunity to translate a verbal sentence into an algebraic sentence.

Mathematics Test



A. Standard of Learning: 7.24 The student will use the following algebraic terms appropriately in written and/or oral expression: equation, inequality, variable, expression, term, coefficient, domain, and range.

Builds To: High school mathematics courses require students to use mathematical terms.

A

45 Which of the following is *not* true?

- A $5x - 7 = 21$ is an expression.
- B $4a + 16$ is an expression with 2 terms.
- C In the expression $7a + 2b$, the coefficient of b is 2.
- D $5x + 7y$ is an expression with two variables.

Instruction: Provide students an opportunity to identify the parts contained within an example of a term.

B. Standard of Learning: 7.25 The student will

a) solve two-step linear equations and inequalities in one variable, using strategies involving inverse operations and integers.

Builds To: High school mathematics courses require students to apply the skills for solving equations and practical problems.

B

46 What is the solution to $2x + 5 < 17$?

- F $x < 6$
- G $x < 11$
- H $x < 12$
- J $x < 24$

Instruction: Provide students an opportunity to solve two-step linear inequality.

M

Mathematics Test

8

GRADE

B. Standard of Learning: 7.25 The student will

b) solve practical problems requiring the solution of a two-step linear equation.

Builds To: High school mathematics courses require students to apply the skills for solving equations and practical problems.

B

47 Janna has driven 200 miles. If she averages 50 miles per hour, how many *more* hours must she drive before she has driven a total of 500 miles?

- A 3
- B 6
- C 12
- D 14

Instruction: Provide students an opportunity to solve practical problems requiring the use of a two-step linear equation.

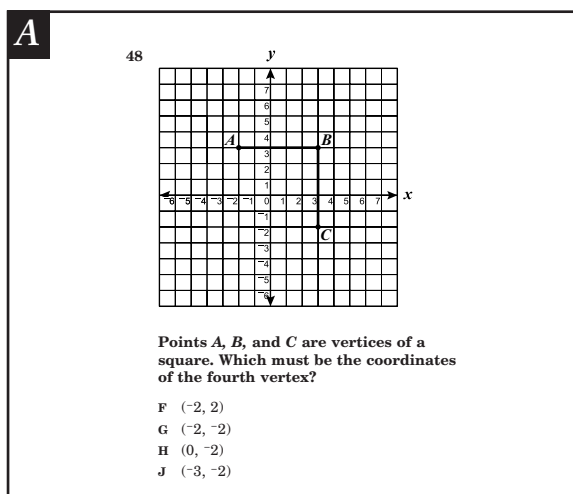
Mathematics Test

8

GRADE

A. Standard of Learning: 7.26 The student will identify and graph ordered pairs in the four quadrants of a coordinate plane.

Builds To: High school mathematics courses require students to use graphing in problem solving situations.



Instruction: Provide students an opportunity to locate a point on a graph in four quadrants and to name the coordinates of the point.

B. Standard of Learning: 8.15 The student will investigate and describe functional relationships, including the number of sides of a regular polygon and the maximum number of possible diagonals, expressing the algebraic concept of the number of diagonals of the n th-sided polygon.

Builds To: High school mathematics courses require students to use functional relationships.

B

- 49 Angie mows lawns in her neighborhood to make money. She charges \$25 per lawn and buys a new mower for \$200. If x is the number of lawns, and p is her profit, which of the following would you use to find Angie's profit?

- A $25x - 200 = p$
B $200 = 25x + p$
C $25x = p - 200$
D $25x + 200 = p$

- 50 The table shows some elements of a function.

n	?
1	$-\frac{1}{2}$
2	$\frac{1}{2}$
3	$\frac{3}{2}$
4	$\frac{5}{2}$

What is the missing rule in this table?

F $\frac{n+1}{2}$

G $\frac{2n-3}{2}$

H $\frac{n}{2}$

J $-\frac{n}{2}$

Instruction: Provide students an opportunity to determine the functional relationship between two variables in a problem situation and to determine the functional relationship when displayed in a table.

Mathematics Test

8

GRADE

A. Standard of Learning: 8.16 The student will solve multi-step equations in one variable.

Builds To: High school mathematics courses require students to apply the skills for solving equations in one variable to more complex problem-solving situations.

A

51 If $3(w - 2) = -8$, what is the value of w ?

- A -6
- B $-\frac{2}{3}$
- C -2
- D $-\frac{2}{3}$

52 What value of y makes $y + (4 - 2y) = 2$ true?

- F 0
- G 2
- H 3
- J 4

Instruction: Provide students an opportunity to solve multi-step equations in one variable.

B. Standard of Learning: 8.17 The student will graph a linear equation in two variables on the coordinate plane, using a table of ordered pairs.

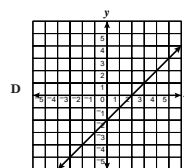
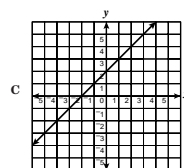
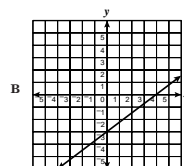
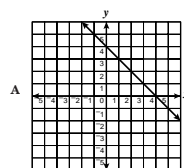
Builds To: High school mathematics courses require students to be able to graph in the coordinate plane.

B

53

x	y
3	1
0	-2
-3	-5

Which graph shows a line that contains the points in the table of ordered pairs?



Instruction: Provide students an opportunity to graph a line using a table of ordered pairs.

Mathematics Test

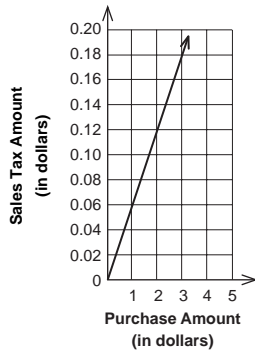


A. Standard of Learning: 8.18 The student will describe and represent relations using tables, graphs, and rules.

Builds To: High school mathematics courses require students to expand on the concept of relations.

A

- 54 The graph shows the amount of sales tax charged for purchases.



Which table best represents the information in this graph?

F

Purchase Amount	Sales Tax Amount
\$1.00	\$0.06
\$2.00	\$0.12
\$3.00	\$0.18
\$4.00	\$0.24

G

Purchase Amount	Sales Tax Amount
\$1.00	\$0.03
\$2.00	\$0.06
\$3.00	\$0.09
\$4.00	\$0.12

H

Purchase Amount	Sales Tax Amount
\$1.00	\$1.00
\$2.00	\$2.00
\$3.00	\$3.00
\$4.00	\$4.00

J

Purchase Amount	Sales Tax Amount
\$1.00	\$2.00
\$2.00	\$4.00
\$3.00	\$6.00
\$4.00	\$7.00

- 55

x	-1	1	2	3
y	0	4	6	8

Which is true for all pairs of values in the table?

- A $y = 2x - 2$
 B $y = 2x + 2$
 C $y = 4x$
 D $y = x + 3$

- 56 Which table shows ordered pairs that satisfy the function $y = 3x + 1$?

F

x	y
0	1
2	7
4	13

G

x	y
-2	1
0	7
2	13

H

x	y
-2	-5
0	0
2	7

J

x	y
0	4
2	7
4	13

Instruction: Provide students an opportunity to determine a table of ordered pairs that satisfy a given function; to determine a table of ordered pairs that correspond to a given graph; and to determine the equation that corresponds to a given table.

Mathematics Test



A. Standard of Learning: 8.19 The student will create and solve problems using proportions, formulas, and functions.

Builds To: High school mathematics courses require students to use proportions, formulas, and functions in more complex problem-solving.

A

- 57 The Vasquez family drove 165 miles in 3 hours. At this same rate, how many miles could they travel in 8 hours?

A 61.875
B 423.3
C 440
D 520

- 59 An object in the current of the Gulf Stream can move 11 miles in 2 hours. At this rate, about how many miles could the object in the Gulf Stream move in 5 hours?

A 55

B $27\frac{1}{2}$

C 10

D $5\frac{1}{2}$

- 58 A taxi company based its fares on the following chart.

Miles	0.2	0.3	0.4	0.5
Fare	\$0.60	\$0.90	\$1.20	\$1.50

If the pattern continues, what would be the fare for a trip of 8.3 miles?

F \$2.49
G \$24.90
H \$49.80
J \$249.00

- 60 A factory that makes computer monitors produced 247 monitors during 5 working days. Which is *closest* to the number of working days that should be allowed to fill an order for 1,000 monitors?

F 15

G 20

H 30

J 40

Instruction: Provide students an opportunity to use the distance formula to solve problems; to solve problems using the functional relationship found in a pattern; and to solve problems using a proportion.

Science Test

GRADE 8

Reporting Category: Scientific Investigation

A. Standard of Learning: 6.1 The student will plan and conduct investigations in which

a) observations are made involving fine discrimination between similar objects and organisms.

Builds To: High school science courses require students to understand characteristics of organisms as they are used for classification.

B. Standard of Learning: 6.1 The student will plan and conduct investigations in which

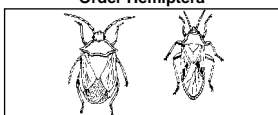
b) a classification system is developed based on multiple attributes.

Builds To: High school science courses require students to understand the development of classification systems.

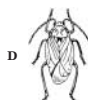
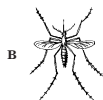
A

1

Order Hemiptera



Based on the position of the wings, which of the insects below is most likely in the order Hemiptera?



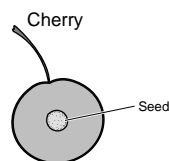
Instruction: Provide students an opportunity to examine pictures of characteristics of an Order (Hemiptera) and then identify another member of the order.

B

2

Key to Some Fruit Types

1 Fruit with many seeds	Go to 2
Fruit with only one or two seeds	Go to 6
2 Fruit with seeds on outside	Aggregate fruit
Fruit with seeds on inside	Go to 3
3 Fruit with spine-like projections on skin	Multiple fruit
Fruit with relatively smooth skin	Go to 4
4 Fruit soft with seeds inside a central papery core	Pome
Seeds not in core	Go to 5
5 Seeds in a pod	Legume
Seeds not in a pod	Berry
6 Fruit with wings for seeds	Samara
Fruit with no wings	Go to 7
7 Soft fruit with single seed in center	Drupe
Dry fruit	Go to 8
8 Thick hard shell around seed	Nut
Very thin papery fruit so that fruit looks like seed	Achene



How should the fruit above be classified?

- F Multiple fruit
- G Pome
- H Berry
- J Drupe

Instruction: Provide students an opportunity to determine the classification of an organism based on characteristics.

Science Test

GRADE

A. Standard of Learning: 6.1 The student will plan and conduct investigations in which

f) hypotheses are stated in ways that identify the independent (manipulated) and dependent (responding) variables.

Builds To: High school science courses require students to form hypotheses and identify the independent and dependent variables.

B. Standard of Learning: 6.1 The student will plan and conduct investigations in which

j) data are organized and communicated through graphical representation (graphs, charts, and diagrams).

Builds To: High school science courses require students to set up data tables and make charts and plot graphs.

A

- 3 Hypothesis: If the amount of nitrogen fertilizer is increased, then the height of the corn increases.

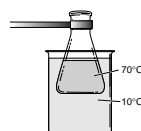
Which of these is the independent (manipulated) variable for an experiment testing this hypothesis?

- A The height of the corn in each experimental group
- B The number of corn plants in the experimental groups
- C The size of the experimental groups
- D The amount of fertilizer added to each experimental group

Instruction: Provide students an opportunity to read a hypothesis statement and identify the independent variable.

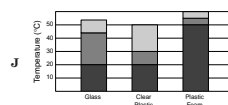
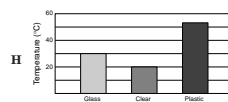
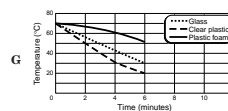
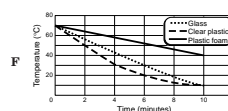
B

4



Time (minutes)	Temperature (°C)		
	Glass	Clear Plastic	Plastic Foam
0	70	70	70
2	55	50	68
4	43	30	60
6	30	20	51

The picture above shows a flask of hot water in a container of cooler water. This test was carried out to find out which type of container would hold heat the longest. Which of these graphs best shows all of the data from this experiment?



Instruction: Provide students an opportunity to interpret a diagram of an experiment with the table of collected data in order to set up a graph.

Science Test

GRADE 8

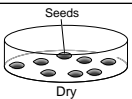
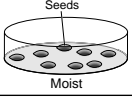
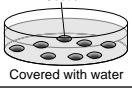
A. Standard of Learning: LS.1 The student will plan and conduct investigations in which

b) variables are defined.

Builds To: High school science courses require students to work with variables in experiments.

A

5

Number of seeds germinated after 5 days	
0	
7	
0	

What is the variable being studied in this experiment?

A Seed number
B Amount of moisture
C Plant size
D Amount of light

Instruction: Provide students an opportunity to examine a diagram of an experiment and determine what variable is being studied.

B. Standard of Learning: LS.1 The student will plan and conduct investigations in which

c) SI (metric) units are used.

Builds To: High school science courses continue the use of metric units.

B

6 Which metric measure would be best to use when measuring the amount of water given to a plant?

F Meters
G Milliliters
H Centimeters
J Kilograms

Instruction: Provide students an opportunity to determine an appropriate metric measure for a given situation.

Science Test



A. Standard of Learning: LS.1 The student will plan and conduct investigations in which

g) dependent variables, independent variables, and constants are identified.

Builds To: High school science courses require students to work with variables in experiments.

B. Standard of Learning: LS.1 The student will plan and conduct investigations in which

i) continuous line graphs are constructed, interpreted, and used to make predictions.

Builds To: High school science courses require students to set up graphs and interpret the information in a graph.

A

7 **Bean Plant Growth After 30 Days**

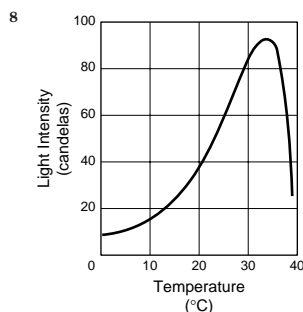
Brand of Fertilizer	Height of Plants (cm)					Mean Height
	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	
A	52	53	51	50	52	51.6
B	58	58	55	56	57	56.8
C	51	52	50	53	52	51.6
No Fertilizer	46	48	46	49	47	47.2

The chart shows the results of a bean plant growth experiment. The plants received equal amounts of water and sunlight each day. Which of these is *not* an example of a constant in this experiment?

- A Growing time
- B Bean plant height
- C Amount of sunlight
- D Amount of water

Instruction: Provide students an opportunity to interpret a data table for an experiment with an explanation of the experiment and identify what CANNOT be a constant.

B



Artificial lights can create a great deal of heat. If a gardener wanted to grow seedlings indoors that grow best at 25°C, which light intensity should be used?

- F 85 candelas
- G 60 candelas
- H 25 candelas
- J 15 candelas

Instruction: Provide students an opportunity to interpret a line graph to answer a specific question.

Science Test

8

GRADE

A. Standard of Learning: LS.1 The student will plan and conduct investigations in which

j) interpretations from the same set of data are evaluated and defended.

Builds To: High school science courses require students to interpret data to determine relationships between variables.

B. Standard of Learning: PS.1 The student will plan and conduct investigations in which

c) data from experiments are recorded and interpreted from bar, line, and circle graphs.

Builds To: High school science courses require students to set up graphs and interpret the information in a graph.

A

9

Mouse Number	Food	Week 1 Mass Gain	Week 2 Mass Gain	Total Mass Gained
1	Rice	6 g	8 g	14 g
2	Grain	5 g	4 g	9 g
3	Corn	8 g	4 g	12 g
4	Mixture	12 g	8 g	20 g

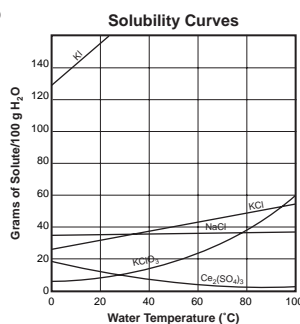
Using the above table, what can you say about the relationship between each food and the mass of the mouse?

- A The mixture-fed mouse gained the most mass.
- B The rice-fed mouse gained the least mass.
- C The grain-fed mouse gained more mass in week 2.
- D The corn-fed mouse gained less mass in week 1.

Instruction: Provide students an opportunity to interpret data in a table to establish a relationship between variables.

B

10



According to the graph, which of these is *least* soluble in water at 20°C?

- F KI
- G KClO_3
- H NaCl
- J $\text{Ce}_2(\text{SO}_4)_3$

Instruction: Provide students an opportunity to interpret a multi-line line graph.

Science Test



A. Standard of Learning: PS.1 The student will plan and conduct investigations in which

f) valid conclusions are made after analyzing data.

Builds To: High school science courses require students to analyze data to make conclusions.

Reporting Category: Force, Motion, Energy, and Matter

B. Standard of Learning: 6.3 The student will investigate and understand sources of energy and their transformations. Key concepts include

b) energy sources (fossil fuels, wood, wind, water, solar, and nuclear power).

Builds To: High school science courses require students to understand energy sources and their effect on the Earth.

A

11

Which one of the above objects is heaviest?

A ☐ Square

B ☐ Oval

C ☐ Circle

D ☐ Rectangle

Instruction: Provide students an opportunity to make a conclusion after analyzing a diagram.

B

12 Which energy source is most important for cars?

F Solar cells

G Fossil fuels

H Denatured alcohol

J Wood

Instruction: Provide students an opportunity to investigate energy sources and uses.

Science Test

8

GRADE

A. Standard of Learning: 6.3 The student will investigate and understand sources of energy and their transformations. Key concepts include

c) energy transformations (mechanical to electrical, electrical to heat/light, chemical to light, and chemical to electrical/light).

Builds To: High school science courses require students to have an understanding of energy transformations.

A

13 Which of these best shows a change from solar energy to chemical energy?

- A Evaporation of water
- B Heating of pavement
- C Photosynthesis in leaves
- D Formation of rainbows

Instruction: Provide students an opportunity to investigate conversion from solar energy to chemical energy.

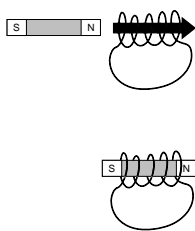
B. Standard of Learning: 6.4 The student will investigate and understand basic characteristics of electricity. Key concepts include

a) electrical energy can be produced from a variety of energy sources and can be transformed into almost any other form of energy.

Builds To: High school science courses require students to have an understanding of energy transformations.

B

14



Which of these forms of energy can be produced by passing the magnet through the coil of wire?

- F Nuclear energy
- G Light energy
- H Chemical energy
- J Electrical energy

Instruction: Provide students an opportunity to investigate electrical energy formed by passing a magnet through a coil of wire.

Science Test

8

GRADE

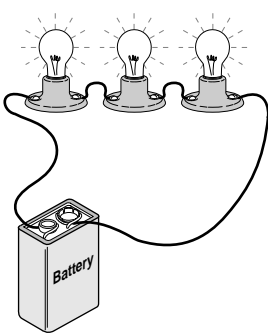
A. Standard of Learning: 6.4 The student will investigate and understand basic characteristics of electricity. Key concepts include

d) circuits can be parallel or series.

Builds To: High school science requires students to understand circuits for use in experiments.

A

15



Which of these best describes this type of circuit?

- A Alternating
- B Parallel
- C Series
- D Open

Instruction: Provide students an opportunity to investigate a series circuit.

B. Standard of Learning: 6.5 The student will investigate and understand that all matter is made up of atoms. Key concepts include

a) atoms are made up of electrons, protons, and neutrons.

Builds To: High school science courses require students to understand atoms and their makeup.

B

16 Which of these have a positive charge and are found in the nucleus of an atom?

- F Neutrons
- G Protons
- H Electrons
- J Elements

Instruction: Provide students an opportunity to investigate the protons of a nucleus.

Science Test



A. Standard of Learning: 6.6 The student will investigate and understand how to classify materials as elements, compounds, or mixtures. Key concepts include

a) mixtures can be separated by physical processes.

Builds To: High school science courses require students to understand how elements, compounds, and mixtures differ.

A

17 A student first dissolves sugar in water, then evaporates the water to make rock candy. The sugar water is an example of —

- A an atom
- B an element
- C a mixture
- D a compound

Instruction: Provide students an opportunity to investigate the separation of sugar and water in an experiment.

B. Standard of Learning: 6.7 The student will investigate and understand that matter has physical and chemical properties and can undergo change. Key concepts include

a) physical changes.

Builds To: High school science courses require students to understand physical changes that occur in matter.

B

18 Which of these is the best example of physical change?

- F A match burning
- G A cake baking
- H A marshmallow roasting
- J A candy bar melting

Instruction: Provide students an opportunity to investigate physical changes in matter.

Science Test

8

GRADE

A. Standard of Learning: 6.7 The student will investigate and understand that matter has physical and chemical properties and can undergo change. Key concepts include

b) changes in chemical composition, including oxidation reactions (rusting and burning), photosynthesis, and acid-base neutralization reactions.

Builds To: High school science courses require students to understand chemical changes that can occur in matter.

A

19 The process of iron combining with oxygen to form rust is considered a chemical change because rust has —

- A properties that differ from both iron and oxygen
- B the same chemical composition as iron
- C a very high melting point
- D greater chemical reactivity than oxygen

Instruction: Provide students an opportunity to identify rusting as an example of a chemical change.

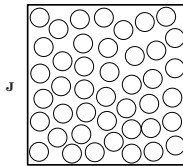
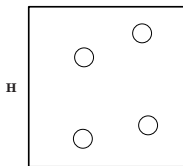
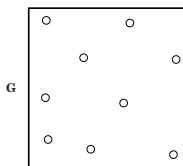
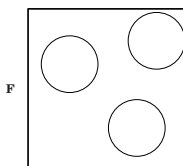
B. Standard of Learning: PS.2 The student will investigate and understand the basic nature of matter. Key concepts include

a) the particle theory of matter.

Builds To: High school science courses require students to understand the basic nature of matter.

B

20 Some students were building models of solids, liquids, and gases by gluing plastic balls to a sheet of cardboard. Which of their models best shows the particles in a solid?



Instruction: Provide students an opportunity to investigate what a particle model for a solid looks like.

Science Test



A. Standard of Learning: PS.2 The student will investigate and understand the basic nature of matter. Key concepts include

b) elements, compounds, mixtures, acids, bases, salts, organic, inorganic, solids, liquids, and gases.

Builds To: High school science courses require students to understand the basic nature of a compound.

A

21 Which of these is a compound?

- A Oxygen in the air
- B Liquid nitrogen
- C Neon in lights
- D Carbon dioxide gas

Instruction: Provide students an opportunity to investigate compounds.

B. Standard of Learning: PS.2 The student will investigate and understand the basic nature of matter. Key concepts include

c) characteristics of types of matter based on physical and chemical properties.

Builds To: High school science courses require students to understand the physical and chemical properties of matter.

B

22 Some thermometers contain alcohol. Alcohol is used in thermometers because it —

- F is soluble in water
- G is a clear gas when it evaporates
- H expands and contracts easily
- J has a high density

Instruction: Provide students an opportunity to investigate the characteristics of alcohol.

Science Test



A. Standard of Learning: PS.3 The student will investigate and understand various models of atomic structure including Bohr and Cloud (quantum) models.

Builds To: High school science courses require students to understand models of atomic structure.

A

23 Which of these is most responsible for chemical reactions?

- A Electrons in the nucleus of the atoms
- B Electrons in the highest occupied energy level of the atoms
- C Electrons closest to the nucleus of the atoms
- D Electrons traveling the fastest toward the center of the atoms

Instruction: Provide students an opportunity to investigate atomic structure and its relation to chemical reactions.

B. Standard of Learning: PS.5 The student will investigate and understand changes in matter and the relationship of these changes to the Law of Conservation of Matter and Energy. Key concepts include

c) chemical changes (types of reactions, reactants and products, and balanced equations).

Builds To: Students will continue to use balanced equations throughout future science courses, especially Chemistry.

B

24 $\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O}$

In this reaction, the products are —

- F CH_4 and 2O_2
- G CH_4 and CO_2
- H 2O_2 and $2\text{H}_2\text{O}$
- J CO_2 and $2\text{H}_2\text{O}$

25 Hydrochloric acid reacts with sodium hydroxide to release water and sodium chloride. Which of these is a balanced chemical equation for this reaction?

- A $2\text{HCl} + \text{NaOH} \rightarrow 2\text{H}_2\text{O} + \text{NaCl}$
- B $\text{HCl} + \text{NaOH} \rightarrow \text{H}_2\text{O} + \text{NaCl}$
- C $\text{HCl} + 2\text{NaOH} \rightarrow \text{H}_2\text{O} + 2\text{NaCl}$
- D $2\text{HCl} + 2\text{NaOH} \rightarrow \text{H}_2\text{O} + 2\text{NaCl}$

Instruction: Provide students an opportunity to write balanced chemical equations for reactions and identify reactants and products in a chemical reaction.

Science Test



A. Standard of Learning: PS.7 The student will investigate and understand temperature scales, heat, and heat transfer. Key concepts include

a) absolute zero, phase change, freezing point, melting point, boiling point, conduction, convection, radiation, vaporization, and condensation.

Builds To: Students will continue to apply their knowledge of vaporization throughout high school science.

A

26 Mercury can vaporize if heated. This means that with enough heat mercury can —

F be destroyed
G become water vapor
H be changed into a gas
J change from a liquid to a solid

Instruction: Provide students an opportunity to investigate vaporization.

B. Standard of Learning: PS.8 The student will investigate and understand characteristics of sound and technological applications of sound waves. Key concepts include

b) technological applications of sound.

Builds To: Students will continue to apply their knowledge of measuring sound waves throughout high school science courses.

B

27 Which of these uses sound waves to measure the distance between objects underwater?

A Radar
B Sonar
C Lasers
D Radio

Instruction: Provide students an opportunity to investigate a variety of technological devices, including sonar, that measure sound waves including sonar.

Science Test

8

GRADE

A. Standard of Learning: PS.10 The student will investigate and understand scientific principles and technological applications of work, force, and motion. Key concepts include

a) work, force, mechanical advantage, efficiency, power, horsepower, gravitational force, speed/velocity, mass/weight, Newton's three laws of motion, acceleration.

Builds To: Students will continue to apply the principles of work throughout high school science.

A

28 According to the scientific definition of work, which of these best shows that work is being done?

- F A lamp hanging from a ceiling
- G A man pushing against a concrete wall
- H A car being towed down a street
- J A rocket drifting through space

Instruction: Provide students an opportunity to apply the scientific definition of work to real-life situations.

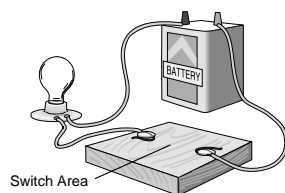
B. Standard of Learning: PS.11 The student will investigate and understand basic principles of electricity and magnetism. Key concepts include

a) static, current, circuits.

Builds To: Students will continue to work with conductors, particularly in high school science courses.

B

29



Light Produced by Closed Circuit

Switch Material	Light Produced			
	Trial 1	Trial 2	Trial 3	Trial 4
Glass Fiber	None	None	None	None
Steel Nail	Bright	Dim	Very Bright	Bright
Aluminum Foil	Very Bright	Bright	Very Bright	Very Bright
Pencil Lead	Dim	Dim	Dim	Dim

According to these data, which material is the poorest electrical conductor?

- A Glass
- B Steel
- C Aluminum
- D Pencil lead

Instruction: Provide students an opportunity to analyze data in a table to determine the poorest conductor of electricity.

Science Test



Reporting Category: Life Systems

A. Standard of Learning: LS.2 The student will investigate and understand that all living things are composed of cells. Key concepts include

a) cell structure and organelles (cell membrane, cell wall, cytoplasm, vacuole, mitochondrion, endoplasmic reticulum, nucleus, and chloroplast).

Builds To: Students will continue to study cells in high school science courses.

A

30 The various organized structures present in the cytoplasm are called organelles. Which of the following organelles is responsible for the release of energy to support cell activities?

- F Mitochondrion
- G Endoplasmic reticulum
- H Vacuole
- J Nucleus

Instruction: Provide students an opportunity to investigate the function of mitochondrion.

B. Standard of Learning: LS.2 The student will investigate and understand that all living things are composed of cells. Key concepts include

b) similarities and differences between plant and animal cells.

Builds To: Students will continue to apply the concept of photosynthesis, especially in high school science courses.

B

31 Animals and plants get their food in different ways. Animals usually ingest their food, while plants must produce their own food. The process through which plants produce their food is called —

- A respiration
- B photosynthesis
- C pollination
- D germination

Instruction: Provide students an opportunity to investigate photosynthesis.

Science Test



A. Standard of Learning: LS.2 The student will investigate and understand that all living things are composed of cells. Key concepts include

c) development of cell theory.

Builds To: Students will continue to work with cell theory, especially in high school science courses.

A

32 Many ideas concerning cells have been proven and incorporated into the cell theory. Which of the following is *not* part of the cell theory?

- F All living things are composed of one or more cells.
- G All cells come from other cells.
- H All functions may be carried out by cells.
- J All cells reproduce through meiosis.

Instruction: Provide students an opportunity to investigate the cell theory.

B. Standard of Learning: LS.3 The student will investigate and understand that living things show patterns of cellular organization. Key concepts include

a) cells, tissues, organs, and systems.

Builds To: Students will continue to work with cellular organization in high school science courses.

B

33 Which of these structures is made up of all of the others?

- A Cells
- B Tissues
- C Systems
- D Organs

Instruction: Provide students an opportunity to investigate the hierarchy within cellular organization.

Science Test

8

GRADE

A. Standard of Learning: LS.5 The student will investigate and understand classification of organisms. Key concepts include

a) differences in number, color, size, shape, and texture of external and internal structures.

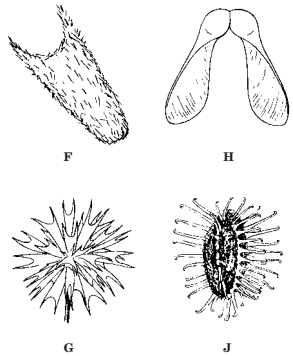
Builds To: Students will continue to work with organisms and how external structures and shapes affect classification of organisms in high school science courses.

A

34 Seeds come in different shapes to help them travel away from the parent plant. Some seeds stick to the fur of animals as they walk close to plants, while other seeds get blown away by the wind. Which of the following seeds probably travels by wind?

35 The hard outer covering of a lobster is called the —

A abdomen
B spine
C vertebra
D exoskeleton



Instruction: Provide students an opportunity to investigate the shape of seeds and the effect the shape has on the travel of the seed; and to investigate the external structure of a lobster.

B. Standard of Learning: LS.13 The student will investigate and understand that organisms reproduce and transmit genetic information to new generations. Key concepts include

b) characteristics that can and cannot be inherited.

Builds To: Students will continue to work with genetics in high school science courses.

B

36 Which of the following traits of a corn plant is *least* influenced by the environment?

F Height
G Root structure
H Color of kernels
J Number of ears produced

Instruction: Provide students an opportunity to investigate characteristics that can and cannot be inherited in corn.

Science Test

8

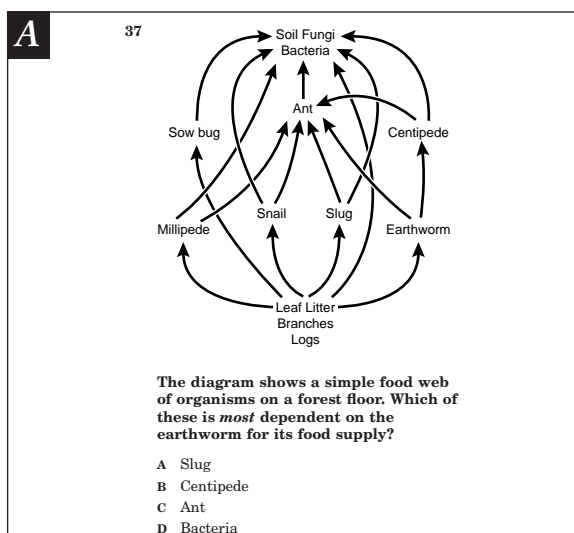
GRADE

Reporting Category: Ecosystems

A. Standard of Learning: 6.9 The student will investigate and understand that organisms depend on other organisms and the nonliving components of the environment. Key concepts include

b) food webs and food pyramids.

Builds To: Students will continue to work with food webs in high school science courses.

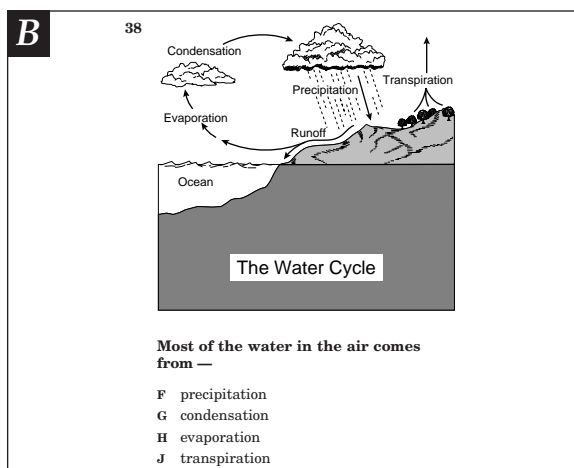


Instruction: Provide students an opportunity to analyze a food web.

B. Standard of Learning: 6.9 The student will investigate and understand that organisms depend on other organisms and the nonliving components of the environment. Key concepts include

c) cycles (water, carbon dioxide/oxygen, nitrogen).

Builds To: Students will continue to work with the water cycle in high school science courses.



Instruction: Provide students an opportunity to analyze a water cycle diagram.

Science Test



A. Standard of Learning: LS.9 The student will investigate and understand interactions among populations in a biological community. Key concepts include

d) symbiotic relationships and niches.

Builds To: Students will continue to work with niches in high school science courses.

A	<p>39 Which of these best describes the niche of a lion?</p> <p>A Parasite B Prey C Predator D Producer</p>
----------	---

Instruction: Provide students an opportunity to investigate niches.

B. Standard of Learning: LS.10 The student will investigate and understand how organisms adapt to biotic and abiotic factors in a biome. Key concepts include

b) characteristics of land, marine, and freshwater biomes.

Builds To: Students will continue to work with biomes in high school science courses.

B	<p>40 Which biome is most suitable for raising crops such as corn, wheat, and oats?</p> <p>F A desert G A taiga H A grassland J A tropical rain forest</p>
----------	--

Instruction: Provide students an opportunity to investigate the characteristics of plants and animals that inhabit a biome.

Science Test

8

GRADE

A. Standard of Learning: LS.10 The student will investigate and understand how organisms adapt to biotic and abiotic factors in a biome. Key concepts include

c) adaptations that enable organisms to survive within a specific biome.

Builds To: Students will continue to work with biomes in high school science courses.

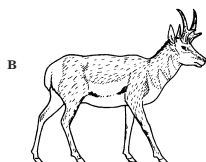
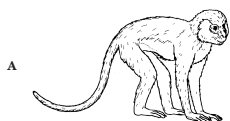
B. Standard of Learning: LS.11 The student will investigate and understand that ecosystems, communities, populations, and organisms are dynamic and change over time (daily, seasonal, and long term). Key concepts include

b) factors that increase or decrease population size.

Builds To: Students will continue to work with ecosystems in high school science courses.

A

41 Which of these is best adapted to a grassland biome?



Instruction: Provide students an opportunity to investigate adaptations needed for a grassland biome.

B

42 An open-air waste water treatment plant is flooded by rain. The rainwater and the waste run into a nearby creek. The organic wastes are very high in Biological Oxidation Demand (BOD) which means the bacteria in the waste need a lot of oxygen. What is the best hypothesis to explain why many fish might die as a result of this event?

- F The bacteria remove the oxygen from the water.
- G The bacteria create toxic wastes.
- H The bacteria are eaten by the fish and are toxic.
- J The bacteria eat all the food in the creek.

Instruction: Provide students an opportunity to investigate the effect of waste in water on the fish population.

Science Test



A. Standard of Learning: LS.12 The student will investigate and understand the relationships between ecosystem dynamics and human activity. Key concepts include

d) population disturbances and factors that threaten and enhance species survival.

Builds To: Students will continue to work with population changes throughout high school science courses.

A

43 There are many factors that influence the population changes of an ecosystem. Which of these does *not* influence population size in an ecosystem?

- A Birthrates of animals
- B Number of animals in habitats
- C An animal's weight
- D The size of a habitat

44 In 1500, between 60 million and 125 million American bison roamed the plains. These bison were used by Native Americans as a primary food source, but this did not have much effect on the bison population. A few hundred years later, railroad crews and settlers moving west also depended on the bison for food. By 1829, it is estimated that less than 100 bison were left. What were the two main causes of the near-extinction of the bison?

- F Disease and overhunting
- G Loss of habitat and disease
- H Overhunting and loss of habitat
- J Loss of habitat and starvation

Instruction: Provide students an opportunity to investigate factors that influence population change and to investigate causes of extinction of species.

Science Test

8

GRADE

Reporting Category: Earth and Space Systems

A. Standard of Learning: 6.10 The student will investigate and understand the organization of the solar system and the relationships among the various bodies that comprise it. Key concepts include

c) the role of gravity.

Builds To: Students will continue to work with the concept of gravity in high school science courses.

A

45 The force that holds objects close to Earth is called —

A air
B ozone
C gravity
D pressure

Instruction: Provide students an opportunity to investigate the role of gravity on Earth.

B. Standard of Learning: 6.10 The student will investigate and understand the organization of the solar system and the relationships among the various bodies that comprise it. Key concepts include

d) revolution and rotation.

Builds To: Students will continue to apply the concept of revolution in high school science courses.

B

46 One complete revolution of a planet around the sun equals one —

F year
G month
H week
J day

Instruction: Provide students an opportunity to investigate revolution of planets.

Science Test



A. Standard of Learning: 6.10 The student will investigate and understand the organization of the solar system and the relationships among the various bodies that comprise it. Key concepts include

g) the cause of tides.

Builds To: Students continue to apply the cause of tides in high school science courses.

A

47 Which of these causes tides on the Earth?

- A The gravitational pull of the moon
- B The revolution of the Earth around the sun
- C Differences in wind speed around the Earth
- D The tilt of the Earth's axis

Instruction: Provide students an opportunity to investigate the cause of tides.

B. Standard of Learning: 6.11 The student will investigate and understand public policy decisions relating to the environment. Key concepts include

c) cost/benefit tradeoffs in conservation policies.

Builds To: Students continue to apply knowledge of environmental policy decisions in high school science courses.

B

48 Nuclear power plants can produce energy more cheaply and with less pollution than plants that use fossil fuels. Why are there not more nuclear power plants than plants that burn fossil fuels?

- F There is an endless supply of fossil fuels available.
- G Nuclear fuels produce too little heat during the fission reaction.
- H A pound of a fossil fuel produces more energy than a pound of nuclear fuel.
- J The problem of disposing large amounts of nuclear waste is not resolved.

Instruction: Provide students an opportunity to investigate the conservation policies concerned with the use of nuclear power plants as energy sources compared to plants that use fossil fuels.

Science Test

8
GRADE


A. Standard of Learning: LS.14 The student will investigate and understand that organisms change over time. Key concepts include

c) how environmental influences, as well as genetic variation, can lead to diversity of organisms.

Builds To: Students continue to apply knowledge of genetics in high school science courses.

A

49

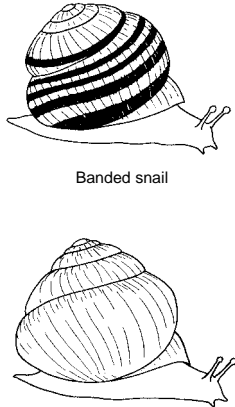


Probing bill Grasping bill Crushing bill

Finches found on the isolated Galapagos islands are different species with different beak sizes and shapes, but are otherwise similar to a finch species found on the South American mainland. What might be the cause of the differences in the development of the beaks of these Galapagos finches?

- A The different types of food available on the islands
- B The original source of the finches
- C The differences in the types of nests the birds built
- D The type of predators found on the islands

50

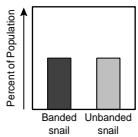


Banded snail

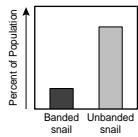
Unbanded snail

Fifty banded and fifty unbanded snails of the same species were released in an area where the banded snails are easily camouflaged. Which of the following best represents the population of these snails after one year?

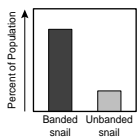
F



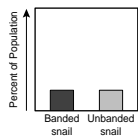
H



G



J



Instruction: Provide students an opportunity to investigate how the type of food available can lead to genetic variation and to investigate how camouflaging can affect a population.

Computer/Technology Test



Reporting Category: Understanding of Application Software

A. Standard of Learning: C/T8.1 The student will communicate through application software.

a) Compose and edit a multipage document at the keyboard, using word processing skills and the writing process steps.

Builds To: Work with the word processing skills in producing a multipage document continues throughout high school and beyond.

A

1 A letter that Ms. Franklin is writing will have all text one inch from the left edge of the paper. This is an example of —

A setting a font
B setting a tab
C setting a margin
D setting line spacing

5

- Elephants
- Tigers
- Lions
- Antelopes

The items in the box above are an example of —

A a dotted list
B a table
C a bulleted list
D a spreadsheet

2 One function of the Insert command in word processing is to —

F erase old text and add new text
G add new text between existing text
H create a word processing file
J save a word processing file on a CD

6 In order to automatically repeat the same text at the bottom of each page of a multipage report —

F use a footer
G type it on each page
H place it in a table
J type in outline mode

3 Peter needs to print only page three of his ten-page report. What is the *best* way to do this?

A Print all the pages and throw away the ones he does not need
B Use the Control key
C Use the print dialog box to select page three
D Go to page three

7 What happens in a word processing document when the “Cut” command is used?

A Only half the screen is seen.
B The application stops running.
C A new paragraph begins.
D Selected text is removed.

4 Times New Roman, Helvetica, and Courier are examples of —

F foreign languages
G fonts
H calculations
J drawing tools

8 Which command is used to place words an equal distance from both the left and right hand margins?

F Page Setup
G Center
H Cut
J Insert

Instruction: Provide students an opportunity to incorporate the following word processing skills into a document: selection of a font; incorporation of a footer; use of the “Insert” key; inclusion of bullets in text; use of the “Cut” function; use of print for a specified page of a document; determination of margins; and use of centering text.

Computer/Technology Test

8

GRADE

A. Standard of Learning: C/T8.1 The student will communicate through application software.

b) Communicate with spreadsheets by entering data and setting up formulas, analyzing data, and creating graphs or charts to visually represent data.

Builds To: Work with spreadsheets continues throughout high school and beyond.

A

- 9 Henry is the new treasurer for the Hospitality club and is using a spreadsheet. He is trying to add the numbers in column B, but they will not add. A possible reason for this is that Henry put the numbers in the wrong —

A format
B order
C color
D spreadsheet

10

	A	B	C	D	E
1	Sport	# of Players Team 1	# of Players Team 2	uniform cost/each	Total
2	Baseball	11	13	\$142.00	\$3,408.00
3	Football	24	26	\$225.00	\$11,250.00
4	Volleyball	15	18	\$87.00	\$2,871.00
5	Soccer	9	8	\$45.00	\$765.00
6	Track	20	14	\$55.00	\$1,870.00
7					
8	Total				\$20,154.00

Which cells should Coach Fran add to find the total number of players on Team 2?

F Cells C3 through C6
G Cells B2 through C7
H Cells C2 through C6
J Cells A6 through D6

11

1	A	B	C	D	E	F
2	Type of Activity	Expected Sales	Sale Price (each)	Cost for Materials	Profit	
3	Bake Sale	240	\$8.50	\$24	\$96	
4	Car Wash	50	\$4.00	\$25	\$175	
5	Flower Sale	120	\$2.00	\$60	\$180	
6	Total Profit					

To get the profit for each activity, Jose multiplied the expected sales by the sale price and then subtracted the cost of the materials needed. The formula in cell E3 would be —

A = (B3*C3)–D3
B = (D3*B3)+C3
C = B3*(C3–D3)
D = B3+(C3*D3)

- 12 To create a graph representing the average growing time of different plants in the science lab, which program should Mika use?

F Database
G Spreadsheet
H Telecommunications
J Word processing

Instruction: Provide students an opportunity to write a formula for a given spreadsheet; identify a row and a cell of a spreadsheet; troubleshoot why a calculation is not working on a spreadsheet; identify a program that can be used to produce a graph; and identify the cells to be added for a given total.

Computer/Technology Test



A. Standard of Learning: C/T8.1 The student will communicate through application software.

b) Communicate with spreadsheets by entering data and setting up formulas, analyzing data, and creating graphs or charts to visually represent data.

Builds To: Work with spreadsheets continues throughout high school and beyond.

A

13

	A	B	C	D	E	F	G
1	Hours worked						
2	Employee	Mon	Tue	Wed	Thu	Fri	Totals
3							
4	D. Smith	7.5	8.0	8.0	8.0	4.0	31.0
5	M. Smith	8.0	6.0	8.0	8.0	6.0	36.0
6	W. Jones	8.0	8.0	8.0	8.0	8.0	40.0
7	L. Darling	8.0	8.0	7.5	8.0	5.5	37.0
8	G. White	8.0	8.0	8.0	8.0	6.0	38.0
9							
10	Totals	39.5	38.0	39.5	40.0	29.5	186.5

The selected box in the spreadsheet above is called —

- A a record
- B the active cell
- C the new cell
- D a field

14

	A	B	C	D	E
1	Expenses	Jan	Feb	Mar	
2					
3	Advertising	1500	2500	2800	
4	Rent	2800	2800	2800	
5	Telephone	250	355	275	
6	Supplies	300	675	950	
7	Insurance	1200	1200	1200	
8	Equipment Rental	490	520	560	
9	Professional Services	500	2500	1200	
10	Salaries	30000	30000	30000	
11	Utilities	450	523	480	
12					

The highlighted part of the spreadsheet shown above is called a —

- F column heading
- G row
- H column
- J row heading

Instruction: Provide students an opportunity to write a formula for a given spreadsheet; identify a row and a cell of a spreadsheet; troubleshoot why a calculation is not working on a spreadsheet; identify a program that can be used to produce a graph; and identify the cells to be added for a given total.

Computer/Technology Test

8
GRADE

A. Standard of Learning: C/T8.1 The student will communicate through application software.

c) Communicate with databases by defining fields and entering data, sorting, and producing reports in various forms.

Builds To: Work with databases continue throughout high school and beyond.

A

15 A database record refers to —

- A all of the data in one group of fields
- B a unit of computer memory
- C the largest group of information in a network
- D a segmented field

16

Common Name	Leaf Type	Flower Type	Flower Color	Location Found
Black-eyed Susan	Toothed	Rayed Petals	Yellow	In front of school
Indian Blanket	Smooth	Rayed Petals	Yellow/Orange	Near to gym
Evening Primrose	Narrow	Broad Petals	Pink	Next to football field
Queen Anne's Lace	Narrow	Cuscut	White	Grassys area by parking lot
Crimson Clover	Oval	Cylindrical	Red	Near to science lab

In this database, the titles "Common Name," "Leaf Type," "Flower Type," "Flower Color," and "Location Found" are called —

- F columns
- G data types
- H field names
- J rows

17

	Title	Author	Cost	Type
<input checked="" type="checkbox"/>	A Pony's Tale	Evans	8.95	Paperback
<input checked="" type="checkbox"/>	Good Night, Friend	Swain	8.50	Paperback
<input checked="" type="checkbox"/>	Beth's Dangerous Adventure	Lee	11.25	Hardcover
<input checked="" type="checkbox"/>	A Book of Animals	Daniels	16.95	Hardcover
<input checked="" type="checkbox"/>	Victory	Murphy	7.95	Paperback

To determine *all* hardcover books written by the same person, the database should be sorted by —

- A author
- B type
- C type and title
- D author and type

18

Pet Name: <u>Sparky</u>
Owner Name: <u>Alberts</u>
Pet Type: <u>Dog</u>
Gender: <u>Male</u>
Color: <u>Black</u>
Last Visit: <u>4/5/88</u>

Molly volunteers at the local animal hospital. She uses a database to track the animal visits. She wants to add Pokey to her database. She would do this by adding a —

- F field
- G list
- H record
- J column

Instruction: Provide students an opportunity to add an entry to a database; to define a database record; to sort information in a database; and to identify fields in a database.

Computer/Technology Test

GRADE
8

A. Standard of Learning: C/T8.1

The student will communicate through application software.

d) Use advanced publishing software, graphics programs, and scanners to produce page layouts.

Builds To: Work with graphics programs and page layouts continues throughout high school and beyond.

B. Standard of Learning: C/T8.1

The student will communicate through application software.

e) Integrate databases, graphics, and spreadsheets into word-processed documents.

Builds To: Work with the integration of graphics into a word-processed document continues throughout high school and beyond.

A

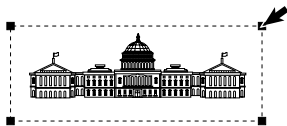
- 19 Manuel wrote a document on his word processor and wants to turn the page sideways. He should set the page's orientation to —

A portrait
B landscape
C legal
D letter

- 20 The main headline for Kimberly's car wash flyer is 72 points. This is the headline's —

F format
G size
H style
J font

21



By clicking and dragging on the point indicated by the arrow, the user will —

A change the color
B cut the graphic
C resize the graphic
D paste the graphic

B

- 22 Walter wants to use a pen and ink drawing as part of a letter to his grandmother on his word processor. What device could he use to create an electronic image of his drawing to put in his letter?

F A monitor
G A scanner
H A keyboard
J A touch screen

- 23 John wants to take a closer look at the wings of a bird he has just drawn on his computer. To do this he needs to use which option?

A Find
B View Full Screen
C Zoom
D Gridlines

- 24 A map of Virginia can be imported into a word processing document from all these sources *except* —

F the Internet
G CD-ROM
H the printer
J another software application

Instruction: Provide students an opportunity to insert a graphic and resize it; to work with different points for headlines; and to change the orientation of a page.

Instruction: Provide students an opportunity to use the "Zoom" option; to use a scanner to import a drawing into a document; and to import a map into a document from a variety of sources.

Computer/Technology Test



Reporting Category: Understanding of Electronic Communications

A. Standard of Learning: C/T8.2 The student will communicate through networks and telecommunication.

a) Use local and worldwide network communication systems.

Builds To: Work with networks continues throughout high school and beyond.

B. Standard of Learning: C/T8.3 The student will have a basic understanding of computer processing, storing, retrieval, and transmission technologies and a practical appreciation of the relevant advantages and disadvantages of various processing, storage, retrieval, and transmission technologies.

Builds To: Work with storing information continues throughout high school and beyond.

A

25 What is the Internet?

- A A computer system that converts spoken words to text
- B A process by which a digitized image turns into a second image
- C A byte of information from a graphic that has been digitized
- D A large network linking computers located around the world

26 James found out that his favorite history program had a website on the Internet. What does he need to know in order to visit the program's site?

- F The state where the website is located
- G What time the program's website is open
- H The Internet address of the website
- J The number of Internet pages of the program's website

27 A local area network (LAN) connects computers that are in —

- A different states
- B the same location
- C distant neighborhoods
- D different countries

Instruction: Provide students an opportunity to define what "Internet" is; to understand the use of a local area network; and to locate a site on the Internet.

B

28 Victor borrowed a floppy disk from a friend. When he opened one of the files in the disk something copied itself onto his computer program. The next day Victor could start his computer but not his program. He had —

- F a faulty monitor
- G a computer virus
- H a computer flu
- J a power failure

29 Brian said his computer had 32K of RAM. The K stands for —

- A kern
- B key
- C megabytes
- D kilobytes

30 What is an advantage of saving your work to a floppy disk?

- F It is faster than saving on a hard drive.
- G Your files cannot be infected with a virus.
- H It can be carried and used at another computer.
- J You can save larger amounts of information.

Instruction: Provide students with an opportunity to use a floppy disk for storing information and understand what advantages it has; to describe what a virus does to a program; and to explain the meaning of K when describing the amount of RAM.

Computer/Technology Test

8
GRADE

Reporting Category: Ability to Access, Retrieve, and Analyze Information

A. Standard of Learning: C/T8.4
The student will process, store, retrieve, and transmit electronic information.

a) Use search strategies to retrieve electronic information.

Builds To: Work with retrieving electronic information continues throughout high school and beyond.

B. Standard of Learning: C/T8.4

The student will process, store, retrieve, and transmit electronic information.

b) Use electronic encyclopedias, almanacs, indexes, and catalogs to retrieve and select relevant information.

Builds To: Work with the retrieval of information from electronic sources continues throughout high school and beyond.

A

31 The results of a database search on the words "volcanoes or magma" would lead to articles or facts that have —

- A both volcanoes and magma in the text
- B either volcanoes, magma, or both in the text
- C neither volcanoes nor magma in the text
- D volcanoes only in the text

Instruction: Provide students an opportunity to use "or" between two words in a database search for information.

B

32 Which term *best* describes audio and video clips contained in an electronic encyclopedia?

- F Events
- G Multimedia
- H Atlas
- J Timeline

33 Helen wants to find out the population of the ten largest cities in the United States. The *best* electronic resource to find this information would be —

- A an almanac
- B a catalog
- C an encyclopedia
- D an index

34 Joe was doing a search on apple pie in an electronic encyclopedia. He entered "apples and dessert" and saw the following:

No articles were found that match the criteria you selected.

He should probably —

- F enter "apples"
- G enter "pie"
- H enter "apple pie"
- J use a different encyclopedia

Instruction: Provide students an opportunity to do a search in an electronic encyclopedia; to determine the best resource for finding specific information; and to experience audio and video clips in an electronic encyclopedia.

Computer/Technology Test

8
GRADE

A. Standard of Learning: C/T8.4 The student will process, store, retrieve, and transmit electronic information.

d) Use local and wide-area networks and modem-delivered services to access and retrieve information from electronic databases.

Builds To: Work with retrieving information from the wide-area network continues throughout high school and beyond.

B. Standard of Learning: C/T8.4 The student will process, store, retrieve, and transmit electronic information.

e) Use databases to perform research.

Builds To: Work with using databases for research continues throughout high school and beyond.

A

- 35 Lacy needs a copy of a poem, but all she can remember is its first line. If the poem is on the World Wide Web, she may be able to get a copy by typing the line she knows into a —

A word processor
B homepage
C search engine
D mailing list

- 36 The generic name for a program to navigate the Internet is —

F postmaster
G webmaster
H browser
J e-mail

Instruction: Provide students with an opportunity to use a browser on the Internet and to use a search engine to locate information.

B

- 37 Louisa created a database containing information about breakfast cereals. She needs to list all the cereals that have more than 1 gram of fat per serving. Which search criteria will give her the correct result?

A (Fat < 1)
B (Fat > 1)
C (Fat = 1)
D (Fat ≥ 1)

- 38 Kerri is doing research on particular battles of the Civil War. She wants to list the battles by date. What would be her *best* action with a database?

F Copy Records
G Sort Records
H Edit Records
J File Records

- 39 Camila wants to search in a database for information on President Jefferson. Which field and data will she have to use to find the information she needs?

A State = Virginia
B School = Jefferson
C Name = President
D Name = Jefferson

Instruction: Provide students with an opportunity to determine the search criteria needed to locate information in a database; to work with field and data notation for a search; and to use the "Sort" function in a database.

Computer/Technology Test



A. Standard of Learning: C/T8.4 The student will process, store, retrieve, and transmit electronic information.

e) Use databases to perform research.

Builds To: Work with using databases for research continues throughout high school and beyond.

A

40

Lisa wants to find all the boys who prefer the Velox video game. What search criteria will give Lisa the correct result?

F (Gender = M) and (Age = 9)

G (Last Name = Male) and (Favorite Video Game = Velox)

H (Last Name = Jones) and (First Name = Mike)

J (Gender = M) and (Favorite Video Game = Velox)

Instruction: Provide students with an opportunity to determine the search criteria needed to locate information in a database; to work with field and data notation for a search; and to use the "Sort" function in a database.

Correct Answers



ENGLISH: *Reading/Literature and Research Test*

1. A 2. G 3. A 4. J 5. D 6. F 7. A 8. H 9. D 10. H
 11. B 12. G 13. B 14. J 15. B 16. H 17. B 18. J 19. C
 20. G 21. A 22. G 23. A 24. H 25. D 26. G 27. D 28. J
 29. A 30. F 31. C 32. H 33. A 34. G 35. B 36. G 37. C
 38. J 39. B 40. J 41. D 42. J

ENGLISH: *Writing Test*

1. C 2. H 3. B 4. H 5. A 6. H 7. D 8. H 9. D 10. H
 11. B 12. G 13. D 14. H 15. B 16. H 17. B 18. H 19. C
 20. J

MATHEMATICS TEST

1. B 2. H 3. C 4. G 5. B 6. J 7. B 8. J 9. C 10. J 11. D
 12. H 13. A 14. H 15. D 16. H 17. B 18. G 19. C 20. F
 21. D 22. J 23. A 24. G 25. D 26. H 27. A 28. H 29. B
 30. H 31. D 32. J 33. D 34. H 35. B 36. G 37. A 38. H
 39. D 40. G 41. C 42. J 43. A 44. F 45. A 46. F 47. B
 48. G 49. A 50. G 51. D 52. G 53. D 54. F 55. B 56. F
 57. C 58. G 59. B 60. G

SCIENCE TEST

1. D 2. J 3. D 4. G 5. B 6. G 7. B 8. G 9. A 10. G
 11. B 12. G 13. C 14. J 15. C 16. G 17. C 18. J 19. A
 20. J 21. D 22. H 23. B 24. J 25. B 26. H 27. B 28. H
 29. A 30. F 31. B 32. J 33. C 34. H 35. D 36. H 37. B
 38. H 39. C 40. H 41. B 42. F 43. C 44. H 45. C 46. F
 47. A 48. J 49. A 50. G

COMPUTER/TECHNOLOGY TEST

1. C 2. G 3. C 4. G 5. C 6. F 7. D 8. G 9. A 10. H
 11. A 12. G 13. B 14. G 15. A 16. H 17. D 18. H 19. B
 20. G 21. C 22. G 23. C 24. H 25. D 26. H 27. B 28. G
 29. D 30. H 31. B 32. G 33. A 34. H 35. C 36. H 37. B
 38. G 39. D 40. J